

TIGARD
COMPREHENSIVE PLAN

VOLUME TWO
FINDINGS, POLICIES AND IMPLEMENTATION STRATEGIES

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VOLUME II

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INTRODUCTION

A. PURPOSE

The Comprehensive Plan is the document through which the citizens of Tigard have made the basic choices on how land development and redevelopment should occur, and how it will be managed. After many years of segmented planning, the seven separate Neighborhood Planning Organization plans comprised the communities' planning efforts. This Comprehensive Plan is intended to aggregate the communities' planning efforts into one "Community Wide Comprehensive Plan" for the Tigard Urban Planning Area.

The purpose of the plan is to maintain and improve the existing quality of life for the residents by:

1. Prohibiting development which would cause a diminution in the existing quality of life for the residents of Tigard;
2. Protecting individuals from the negative impact of developing land which has natural hazards and is subject to natural disasters;
3. Identifying and protecting resource lands from urban development encroachment;
4. Providing for the retention of natural and cultural resources which contribute to the livability of the community;
5. Providing adequate land to meet anticipated future demands for urban development in a logical and orderly manner;
6. Encouraging flexibility and innovation in development techniques to permit diversity within the community and to slow the increase in development costs;
7. Reducing the uncertainty of the development process;
8. Contributing to a healthy, stable and diversified economy within Tigard;
9. Providing for an orderly and timely arrangement and provision of public facilities and services to function as the framework for urban development; and
10. Facilitating citizen participation in all phases of the planning process.

The Tigard Comprehensive Plan is the plan on which land use decisions will be made for the area within the Tigard Urban Planning Area during the planning period (1980-2000). In areas outside the Tigard city limits, Washington County retains legal jurisdiction over development proposals and public improvement projects. The City, however, reviews and makes recommendations on proposals and projects inside the Urban Planning Area, and often coordinates with the County on related projects.

An Urban Planning Area Agreement between Tigard and Washington County regarding planning in the Tigard Urban Planning Area has been adopted. This agreement includes recognition of an Urban Planning Area boundary and related policies which are intended to:

1. Identify planning efforts for the City of Tigard and Washington County;
2. Provide for an orderly and efficient transition from urbanizable to urban land; and
3. Provide a process by which the City may expand the Urban Planning Area boundary when the City, County and affected property owners find that such an extension is necessary.

B. PLAN FORMAT

Each of the first eleven Plan Sections are organized in the following manner:

1. An introductory statement including a discussion of the intent and purpose, precedes each policy;
2. Brief statements of the findings which were developed for the factual material in the comprehensive plan resource reports;
3. The policy statements and directives to the City for making decisions and preparing plans; and
4. Implementation strategies which are recommendations and set forth the means for implementing the

plan; i.e., the preparation of specific plans, adopting of regulations, and special study commissions.

The twelfth chapter of the document contains locational criteria policies which establish standards for the designation of land use areas on the plan map and for making decisions on development proposals. These policies apply to the location of housing, commercial, industrial and public utilities and facilities.

The policies establish the limits within which land development will occur in Tigard over the planning period (from 1980-2000). They also provide the generalized framework upon which more detailed plans and implementation mechanisms will be based. These may include:

1. The application of the plan policies when reviewing development requests, i.e., subdivisions, planned developments, zoning district changes;
2. The formation of land development regulations into a unified Community Development Code;
3. The establishment of a growth management system which coordinates and evaluates a wide variety of existing mechanisms for the purpose of guiding the timing, type and location of growth;
4. The updating and yearly evaluation of the capital improvement program for the acquisition and development of public facilities and services;
5. The coordination agreements between jurisdictions and other agencies;
6. The continued work on the revitalization of Tigard's Central Business District;
7. The application of functional plans such as transportation, parks and recreation, sanitary sewers, water, etc., to urban planning and development review; and
8. The requirements of the City Charter, City ordinances, and City Council policies.

Due to the nature of the planning process, the contents of many of the chapters are interrelated with each other. No chapter is complete unto itself. Each chapter represents an aspect, from a particular point of reference, of a total system of policy direction. Thus the plan needs to be viewed and used as a whole.

The legal effects of the policies and implementation strategies are twofold:

1. They set direction for the City during the planning period; and
2. They establish the basis for an ongoing work program for the City.

Another integral aspect of the comprehensive plan is the Comprehensive Plan Map which is intended to be the visual representative of the policies and adopted land uses. Where there are apparent inconsistencies between the policies and the map, the policies shall control.

C. GOVERNMENTAL COORDINATION

The City's planning efforts include not only the City's commitment[s] to land use planning, but also those planning and development commitments made by other governmental jurisdictions and agencies.

1. Land Conservation and Development Commission (LCDC)

State law mandates that cities and counties prepare comprehensive plans in accordance with applicable statewide land use planning goals. LCDC's land use planning goals establish a planning process and a policy framework to guide all decisions and actions related to the use of land. The City's plan is intended to be consistent with applicable LCDC goals.

2. Metropolitan Service District (MSD)

MSD, the regional planning agency, has adopted regional policy guidelines for managing growth within the regional urban growth boundary (UGB). Although these policy guidelines are not absolute requirements, they do establish objectives and targets for the region. Major identified urban growth policies are:

- a. Urban Growth Boundary Findings;
- b. Housing Goals and Objectives; and

- c. The Regional Transportation Plan (RTP).
- 3. Washington County

The Urban Planning Area Agreements (UPAA), drawn between the cities and the County, identify areas of planning interest together with appropriate policy commitments (i.e., growth management strategies, annexation policies). The UPAA's provide an opportunity for the cities and the County to comment on a variety of land use actions in unincorporated Washington County.

D. HOW TO USE THE PLAN FOR LAND USE ACTIONS

1. Functions of the Plan

The plan serves an administrative as well as legislative function. With respect to administrative or quasi-judicial matters, the plan establishes a policy framework for decision making on such matters as:

- a. Revisions to the Comprehensive Plan;
- b. Zoning district changes;
- c. Conditional developments; and
- d. Subdivisions.

2. Land Use Actions - How to Use the Plan

In order to determine the effect of the plan on individual parcels of land, or on proposals for development, the following steps can be followed:

- a. Determine the land use classification that applies to a specific parcel of land and read the related plan text and policies;
- b. Call the City Planning and Development Department, and ask for the zoning district designation on the property by providing them with the legal description, i.e., the Section, Township, Range and Lot Number or Subdivision Name, Block and Lot Number;
- c. If the plan and zoning accord with what you want to do, check with the Planning and Development Department to determine if there are any other applicable regulations; or
- d. If the plan or zoning district prohibits the proposed use, request a preapplication conference with the Planning and Development Department staff for assistance in determining all of the alternative courses of action.

1. GENERAL POLICIES

The purpose of this section is to establish the relationship between the City of Tigard's Comprehensive Plan and:

1. Chapter 197 of the Oregon Revised Statutes and the Statewide Planning Goals and Guidelines of the Land Conservation and Development Commission;
2. The Regional Plan set forth by the Metropolitan Service District;
3. The Comprehensive Framework Plan and policies of Washington County;
4. The requirement that plans be updated. The plan will be updated to ensure that the plan, as the land use policy for Tigard, reflects the changing needs and circumstances of the community.

Findings

- Each plan adopted under the Land Conservation and Development Commission's Statewide Planning Goals and Guidelines must meet the following:
 1. Goal #1: Develop a citizen involvement program that ensures the opportunity for citizens to get involved in all aspects of the planning process;
 2. Goal #2: Establish a land use planning process and policy framework as the basis of all land use decisions and actions, and ensure an adequate factual data base to substantiate those decisions and actions;
 3. Goal #3: Preserve and maintain agricultural lands beyond the Urban Growth Boundary of the community;
 4. Goal #4: Conserve forest lands, not committed for urban uses, for strictly forest uses;
 5. Goal #5: Conserve open space and protect natural and service resources;
 6. Goal #6: Maintain and improve the quality of air, water and land resources;
 7. Goal #7: Protect the community's life and property from natural disaster and hazard areas;
 8. Goal #8: Meet the recreational needs of residents of the community, State, and visitors;
 9. Goal #9: Diversify and improve the economy of the community and the State;
 10. Goal #10: Provide adequate housing for the needs of the community, region and state;
 11. Goal #11: Plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as the framework for urban development;
 12. Goal #12: Provide and encourage a safe, convenient and economic transportation system;
 13. Goal #13: Conserve energy; and
 14. Goal #14: Provide for an orderly and efficient transition from urbanizable to urban land uses.
- The Metropolitan Service District established a Regional Urban Growth Boundary which includes enough land to accommodate urban needs to the year 2000. This boundary includes all of Tigard.
- The City of Tigard's Comprehensive Plan includes three parts: The first part includes the individual comprehensive plan reports (Citizens Involvement; Natural Features and Open Space; Air, Water and Land Resources; Economy; Housing; Public Facilities and Services; Transportation; Energy and Urbanization.), which constitute the findings; the second part of the plan includes the summary and policy document for the findings, policies and implementation strategies; and the third part of the plan includes the Tigard Community Development Code, which sets forth the development standards and outlines the procedures for obtaining the necessary development approvals.

- The ongoing planning program will include the preparation of a capital improvement plan outlining the major capital investments needed to realize full development of the planning area, funding sources and a budget.

POLICIES

1.1.1 THE CITY SHALL ENSURE THAT:

- a. THIS COMPREHENSIVE PLAN AND ALL FUTURE LEGISLATIVE CHANGES ARE CONSISTENT WITH THE STATEWIDE PLANNING GOALS ADOPTED BY THE LAND CONSERVATION AND DEVELOPMENT COMMISSION, THE REGIONAL PLAN ADOPTED BY THE METROPOLITAN SERVICE DISTRICT;
- b. ANY NEIGHBORHOOD PLANNING ORGANIZATION PLANS AND IMPLEMENTATION MEASURES ADOPTED BY THE CITY OF TIGARD AFTER THE EFFECTIVE DATE OF THIS COMPREHENSIVE PLAN ARE DESIGNED TO BE CONSISTENT WITH THIS PLAN; AND
- c. THE TIGARD COMPREHENSIVE PLAN AND COMMUNITY DEVELOPMENT CODE ARE KEPT CURRENT WITH THE NEEDS OF THE COMMUNITY. IN ORDER TO DO THIS:
 1. THIS PLAN SHALL BE REVIEWED AND UPDATED AT LEAST EVERY FIVE YEARS.

1.1.2 THE COMPREHENSIVE PLAN AND EACH OF ITS ELEMENTS SHALL BE OPENED FOR AMENDMENTS THAT CONSIDER COMPLIANCE WITH THE PLANS OF THE METROPOLITAN SERVICE DISTRICT (MSD) OR ITS SUCCESSOR ON AN ANNUAL BASIS, AND MAY BE SO AMENDED OR REVISED IF DEEMED NECESSARY BY THE CITY COUNCIL. ANNUAL AMENDMENT AND REVISION FOR COMPLIANCE WITH THE ABOVE REGIONAL GOALS, OBJECTIVES AND PLANS SHALL BE CONSISTENT WITH ANY SCHEDULE FOR RE-OPENING OF LOCAL PLANS APPROVED BY THE LAND CONSERVATION AND DEVELOPMENT COMMISSION (LCDC).

THIS PROVISION IS NOT TO BE CONSTRUED AS WAIVING ANY LEGAL RIGHTS WHICH THE CITY MAY HAVE TO CHALLENGE THE LEGALITY OF A REGIONAL GOAL, OBJECTIVE, OR PLAN PROVISION.

IMPLEMENTATION STRATEGIES

1. The Comprehensive Plan Future Land Use Map and the Official Zoning District map will reflect the plan policies and apply land use categories in the following manner:
 - a. Low Density Residential - 1 to 5 units to the net acre. The applicable zoning districts are all single family residential (R-1, R-2, R-3.5 and R-4.5).
 - b. Medium Density Residential - 6 to 12 units to the net acre. The applicable zoning district are multiple family (R-7 and R-12).
 - c. Medium - High Density Residential - 13 to 20 units to the net acre. The applicable zoning district is R-20.
 - d. High Density Residential - 20 to 40+ units to the net acre. The applicable zoning districts are R-20, and R-40.
 - e. Neighborhood Commercial - Areas of concentration of small commercial and personal service activities and related uses necessary to satisfy the daily shopping and related needs of nearby residents. The applicable zoning district is Neighborhood Commercial (C-N).
 - f. General Commercial - Refers to areas for auto-oriented and related commercial uses located along major trafficways. The applicable zoning district is General Commercial (C-G).

- g. Commercial Professional - Areas deemed appropriate for business and professional offices and related uses. The applicable zoning district is Commercial Professional (C-P).
- h. Central Business District - The area deemed appropriate for high intensity mixed use development allowing commercial, office, as well as higher density residential uses of a minimum of 40 units per acre. The applicable zoning districts are, the Central Business District (CBD) and the Special District which limits residential uses to 12 units per acre.
- i. Mixed Use Employment District - Areas with a development concept that is characterized by retail, office and service commercial uses, with business park and research facilities. High density residential development will be encouraged.
- j. Light Industrial - Refers to areas deemed appropriate for industrial activities which include manufacturing, processing, assembling, packaging or treatment of products from previously prepared materials and which are devoid of nuisance factors that would adversely affect other properties. The appropriate zoning districts are Light Industrial (I-L) and Industrial Park (I-P) which also permit offices and related uses.
- k. Heavy Industrial - Those areas deemed appropriate for intensive manufacturing, processing, or assembly of semi-finished or finished products, including fabrication, and whose operating characteristics are potentially incompatible with most other land uses.
- l. Public/Institutional - Refers to areas deemed for municipal uses, school uses or other public uses, e.g., Durham Treatment Plant.
- m. Open Space - Areas designated for retention in a natural state and for development for recreational uses, e.g., floodplain, parks, etc.
- n. Mixed Use Commercial District – Principle development in these areas will be high density office buildings, retail and service uses. MUC districts will encourage larger buildings with parking under, behind or alongside the structures. There are two applicable mixed use commercial zoning districts: MUC and MUC-1. A zoning designation of MUC will also allow mixed-use development and housing at densities of 50 units an acres. The Regional Center Plan recommends that land around the Washington Square Mall and land immediately west of Highway 217 be designated MUC. A zoning designation of MUC-1 will allow mixed-use development and housing at densities of 25 to 50 units an acre. The MUC-1 district is applied to the Durham Quarry site.
- o. Mixed Use Residential District - The MUR designation is appropriate for predominantly residential areas where mixed uses are permitted when compatible with the residential use. Areas will be designated high density (MUR-1) or moderate density (MUR-2). Locations within the Washington Square Regional Center are appropriate for this mixed-use designation.

(Rev. Ord. 02-12)

- 2. The Community Development Code (C.D.C.) shall provide quasi-judicial changes to the Comprehensive Plan Map which may be initiated by affected parties on a semi-annual basis and approved if the City Council finds:
 - a. The change is consistent with applicable plan policies;
 - b. A change of physical circumstances has occurred since the original designation; or
 - c. A mistake was made in the original land use designation.
- 3. Functional master plans shall be prepared and implemented in conformance with the Comprehensive Plan and the Tigard Community Development Code.

2. CITIZEN INVOLVEMENT

This chapter addresses Statewide Planning Goal #1:

"To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process."

Tigard is now well known for its active citizen participation program; primarily with the Neighborhood Planning Organizations. Through the drafting and adoption of the Comprehensive Plan, these organizations contributed their time and energy developing Tigard's plan.

Plan policies have been prepared to preserve the continuity of Tigard's active citizen involvement program and to ensure that citizens will continue to have access to information that enables them to identify, understand, and have input into the planning issues related to implementation of the Comprehensive Plan.

Additional information on this topic is available in the "Comprehensive Plan Report: Citizens Involvement."

Findings

- Throughout the development of the Tigard Comprehensive Plan, the City has actively sought the participation of Neighborhood Planning Organizations and other citizens groups.
- The Neighborhood Planning Organizations and the Committee for Citizen Involvement met on a monthly basis throughout the Comprehensive Plan revision process.
- Continued citizen participation in all aspects of land use planning helps to ensure that City government meets the needs of Tigard's citizens.
- In order to participate in land use planning decisions, citizens need to have access to information which enables them to become aware of and informed about planning issues and City policies. It is essential that this information be made available to all citizens in an understandable form.
- Land use planning education is important to promote and stimulate interest in the citizen participation process during all phases of planning.

POLICY

- 2.1.1 THE CITY SHALL MAINTAIN AN ONGOING CITIZEN INVOLVEMENT PROGRAM AND SHALL ASSURE THAT CITIZENS WILL BE PROVIDED AN OPPORTUNITY TO BE INVOLVED IN ALL PHASES OF THE PLANNING PROCESS.

IMPLEMENTATION STRATEGIES

1. The City shall periodically review notification requirements and methods to determine if they adequately provide notice to affected citizens and revise these requirements and methods as necessary.
2. The City shall continue to assist and support any City Council recognized citizen group in providing adequate meeting places, distribution of materials, policy direction and staff involvement.
3. Additional citizen task forces shall be appointed by the City Council, as the need arises, to advise the City with regard to Comprehensive Plan issues.

POLICY

- 2.1.2 THE OPPORTUNITIES FOR CITIZEN INVOLVEMENT PROVIDED BY THE CITY SHALL BE APPROPRIATE TO THE SCALE OF THE PLANNING EFFORT AND SHALL INVOLVE A BROAD CROSS-SECTION OF THE COMMUNITY:
- a. THE CITIZEN INVOLVEMENT TEAMS SHALL BE THE PRIMARY MEANS FOR CARRYING OUT THE PROGRAM;

- b. WHERE APPROPRIATE, OTHER INVOLVEMENT TECHNIQUES WILL BE USED; AND
- c. THE CITIZEN INVOLVEMENT TEAM FACILITATORS SHALL SERVE AS THE COMMITTEE FOR CITIZEN INVOLVEMENT AND SHALL BE RESPONSIBLE FOR EVALUATING THE CITIZEN INVOLVEMENT PROGRAM AND FOR WORKING WITH THE NEIGHBORHOOD PLANNING ORGANIZATIONS IN RECOMMENDING CHANGES IN THE PROGRAM.

IMPLEMENTATION STRATEGIES

- 1. The Committee for Citizen Involvement shall conduct their citizen involvement programs in accordance with the needs of the Tigard community and LCDC Goal #1 requirements. A review and evaluation of each group's programs and processes shall be reported to the Planning Commission and City Council on a yearly basis.
- 2. The City Council, the Planning Commission, and the Committee for Citizen Involvement shall recommend, as needed, additional methods for involving citizens in the planning process.

POLICY

- 2.1.3 THE CITY SHALL ENSURE THAT INFORMATION ON LAND USE PLANNING ISSUES IS AVAILABLE IN AN UNDERSTANDABLE FORM FOR ALL INTERESTED CITIZENS.

IMPLEMENTATION STRATEGIES

- 1. The City shall continue to publish information on land use planning issues in a form accessible to all citizens. (Ord. 93-19)

3. NATURAL FEATURES AND OPEN SPACE

This chapter addresses a broad range of topics all having to do with the natural resources located within the Tigard Urban Planning Area. This chapter reflects the concerns expressed in several of the Statewide Planning Goals including:

Goal #3 - Agricultural Lands; Goal #4 - Forest Land; Goal #5 - Open Spaces; Scenic and Historic Areas and Natural Resources; Goal #7 - Areas subject to Natural Disasters and Hazards; and Goal #8 - Recreational Needs.

The natural environments within the planning area offer many opportunities for a unique and healthy urban development. Those environments, when viewed as a series of systems rather than isolated features, will provide Tigard with those elements necessary for a healthy place in which to live, work and play. Floodplain greenways, for example, can provide the community with an excellent system of open space links between neighborhoods and services, in addition to providing a relatively inexpensive system for storm water runoff. It is to the community's benefit that consideration be given to both the opportunities and the limitations of the various environments within the planning area.

The natural environments included within the planning area all have their own respective limitations with regard to urbanization. Development pressure upon lands with such limitations can have profound effects on the environment. Erosion of steep slopes caused by inappropriate development, for instance, does not occur as an isolated incident. Soil type, permeability, vegetation and drainage all play major roles in and are effected by development. Likewise, the effects of inappropriate development located within the floodplain areas could have adverse effects on properties both up and down stream from the development site. The social, cultural and economic values of such resource lands could be reduced by the effects of urban development nearby. The limitations of the various environments should be considered in reviewing new development within the planning area.

The recognition of the natural environment in the planning area and the development of findings and policies which address the characteristics of the environment are extremely important elements in the Comprehensive Plan. The purpose of this chapter is to define the parameters of the various natural environments in the planning area and to identify the limitations and opportunities inherent in those environments.

Additional information on this topic is available in the "Comprehensive Plan Report: Natural Features and Open Spaces."

3.1 PHYSICAL LIMITATIONS, NATURAL HAZARDS AND WETLANDS

Findings

- The physical features which form the make-up of any piece of land have a direct relationship to the type and density of development which can be accommodated on that property (carrying capacity). Combinations such as steep slopes and unstable soils create severe development constraints. Excessive development in such physically limited areas greatly increases the potential severity of landslide, earthquake damage, flooding, etc.
- Many portions of the floodplain area contain natural aspects such as significant vegetation, wildlife, and scenic areas, and are valuable for open space and recreation.
- Vegetation serves an essential element in runoff and erosion control, as well as for the protection and natural habitation of wildlife. Nonetheless, it is too often removed and replaced by buildings or impervious surfaces.
- Due to the general nature of soils and geologic mapping, site specific analysis is often necessary to determine the presence of geologic hazards and the severity of soil problems which are constraints to development. Such geologic hazards exist when certain combinations of slope, soil, [and] bedrock and moisture render land unstable.
- Earthflow and slump areas exist in hilly sections of the planning area and are associated with poor drainage, shallow subsurface flow on ground water and springs, and high susceptibility to erosion. Earthflow and slump occurrences can destroy roads and buildings, and adversely affect water quality. Mass movement has not resulted in any major loss of life or property thus far, because little in the way of urban development exists on land with serious problems.
- Increased runoff and sedimentation from poorly developed hillsides can require increased public

expenditures for flood and erosion control and storm water management.

- The City of Tigard had adopted a "Hillside Development Provision" within the Sensitive Lands ordinance which requires additional review of those developments.
- The City of Tigard requires new developments to have a storm water runoff plan to ensure against adverse effects such as erosion and sediment.

POLICY

- 3.1.1 THE CITY SHALL NOT ALLOW DEVELOPMENT IN AREAS HAVING THE FOLLOWING DEVELOPMENT LIMITATIONS EXCEPT WHERE IT CAN BE SHOWN THAT ESTABLISHED AND PROVEN ENGINEERING TECHNIQUES RELATED TO A SPECIFIC SITE PLAN WILL MAKE THE AREA SUITABLE FOR THE PROPOSED DEVELOPMENT. (NOTE: THIS POLICY DOES NOT APPLY TO LANDS DESIGNATED AS SIGNIFICANT WETLANDS ON THE FLOODPLAIN AND WETLANDS MAP.):
- a. AREAS MEETING THE DEFINITION OF WETLANDS UNDER CHAPTER 18.26 OF THE COMMUNITY DEVELOPMENT CODE;
 - b. AREAS HAVING A SEVERE SOIL EROSION POTENTIAL;
 - c. AREAS SUBJECT TO SLUMPING, EARTH SLIDES OR MOVEMENT;
 - d. AREAS HAVING SLOPES IN EXCESS OF 25%; OR
 - e. AREAS HAVING SEVERE WEAK FOUNDATION SOILS.

(Rev. Ord. 85-13; Ord. 84-36)

IMPLEMENTATION STRATEGIES

1. Areas having physical limitations (poor drainage, seasonal flooding, unstable ground) may be subject to policy 3.1.1 of the Comprehensive Plan.
2. The City shall revise the Sensitive Lands section of the Tigard Community Development Code to identify the standards and define those areas having distinct constraints and limitations.
3. The City shall cooperate with other agencies to help identify these areas.
4. The City of Tigard shall provide in the Community Development Code a provision for the City to require site specific soil surveys and geologic studies where potential hazards are identified based upon available geologic and soils evidence. When natural hazards are identified, the City will require that special design considerations and construction measures be taken to offset the soil and geologic constraints present in order to protect life and property, and to protect environmentally sensitive areas.
5. The Community Development Code shall not permit developments to be planned or located in known areas of natural disasters and hazards without appropriate safeguards. (Rev. Ord. 85-13)

3.2 FLOODPLAINS

Findings

- The objective of the City is to use the detailed information gathered on floodplains from the U.S. Army Corps of Engineers, and develop policies to:
 1. Control development, as to not adversely affect the floodplain and floodway areas;

2. Minimize the runoff-erosion impact of development on the surrounding area and downstream properties; and
 3. Emphasize the retention of a vegetative buffer along streams and drainageways, to reduce runoff and flood damage and provide erosion and siltation control.
- In addition, there is the issue of the cumulative effect of development upstream of Tigard. Flood levels in Tigard will be substantially determined by the controls exercised over development outside the plan area, as well as inside Tigard's Planning Area.
 - The Fanno Creek drainage system includes numerous small water courses. The integrity of these natural drainageways is intrinsically connected to the systems capacity to absorb excessive runoff and on subsequent flood levels. Often, however, water courses are altered to provide more usable land. If alterations are done incorrectly, impacts can be adverse. If the impacts are adverse, they can be detrimental to the entire drainage system, i.e., the storage capacity of the water course is lessened and flooding occurs. In fact, in lower reaches, it is beneficial to have more water move through at a faster rate.
 - Besides the basic need to control development in flood prone areas, it was found that public knowledge of flood plain hazards was lacking. Many of the obstructions previously placed in the flood plain were the result of a lack of information and adequate runoff predictions about potential flooding problems. These obstructions (e.g., Main Street Bridge) hinder the flow of high water and tend to increase flood levels.
 - Proper administration of the floodplain areas relies heavily upon the availability of adequate information upon which to assess the environmental impacts of a project. The development, which creates the need, should be responsible for providing the City with the necessary data for making sound decisions. The burden is on the applicant to prove that a project will not adversely affect the environment or create undue future liabilities for the City.
 - The City of Tigard, with assistance from The U.S. Army Corps of Engineers, has established an area designated within the 100-year floodplain.
 - The City of Tigard has been accepted as an eligible area for the National Flood Insurance Program, and as a result flood insurance will be available to property owners in flood prone areas. The federal program, however, requires the City to adopt an ordinance which meets certain federal standards.
 - The City of Tigard currently has ordinances, policies and standards within the Tigard Community Development Code which provide adequate controls for development within floodplain areas.
 - According to the 1981 Drainage Master Plan Study conducted by CH₂M Hill for the City, flood levels of two to four feet higher than the existing 100-year floodplain may be expected if no corrective measures are taken.
 - To protect the intent of the City's Greenway policy, the Greenway is defined with the same physical boundaries as the 100-year floodplain boundary. (Rev. Ord. 85-13)

POLICIES

- 3.2.1 THE CITY SHALL PROHIBIT ANY LAND FROM ALTERATIONS OR DEVELOPMENTS IN THE 100-YEAR FLOODPLAIN WHICH WOULD RESULT IN ANY RISE IN ELEVATION OF THE 100-YEAR FLOODPLAIN.
- 3.2.2 THE CITY SHALL:
 - a. PROHIBIT LAND FORM ALTERATIONS AND DEVELOPMENT IN THE FLOODWAY*, EXCEPT ALTERATIONS MAY BE ALLOWED WHICH PRESERVE OR ENHANCE THE FUNCTION AND MAINTENANCE OF THE ZERO-FOOT RISE FLOODWAY*; AND
 - b. ALLOW LAND FORM ALTERATIONS OR DEVELOPMENT IN THE FLOODPLAIN* OUTSIDE THE ZERO-FOOT RISE FLOODWAY* WHICH PRESERVE OR ENHANCE THE FUNCTION OF THE ZERO-FOOT RISE FLOODWAY* PROVIDED:

1. THE LAND FORM ALTERATION AND/OR DEVELOPMENT IS IN AN AREA DESIGNATED COMMERCIAL OR INDUSTRIAL ON THE COMPREHENSIVE PLAN LAND USE MAP, AND FACTORS SET FORTH IN POLICY 3.2.3 CAN BE SATISFIED; OR
2. THE LAND FORM ALTERATION AND/OR DEVELOPMENT IS ASSOCIATED WITH COMMUNITY RECREATION USES, UTILITIES, OR PUBLIC SUPPORT FACILITIES AS DEFINED IN CHAPTER 18.42 OF THE COMMUNITY DEVELOPMENT CODE AND THE FACTORS SET FORTH IN POLICY 3.2.3 CAN BE SATISFIED.

3.2.3 WHERE LAND FORM ALTERATIONS AND DEVELOPMENT ARE ALLOWED WITHIN THE 100-YEAR FLOODPLAIN* OUTSIDE THE ZERO-FOOT RISE FLOODWAY*, THE CITY SHALL REQUIRE:

- a. THE STREAMFLOW CAPACITY OF THE ZERO-FOOT RISE FLOODWAY* BE MAINTAINED;
- b. ENGINEERED DRAWINGS AND/OR DOCUMENTATION SHOWING THAT THERE WILL BE NO DETRIMENTAL UPSTREAM OR DOWNSTREAM EFFECTS IN THE FLOODPLAIN* AREA, AND THAT THE CRITERIA SET FORTH IN THE SENSITIVE LANDS SECTION OF THE CODE HAVE BEEN MET (See FIS September 1981);
- c. A BUFFER, EITHER EXISTING OR PLANTED, ON THE COMMERCIAL OR INDUSTRIAL LAND ABUTTING RESIDENTIAL LAND WHICH ADEQUATELY SCREENS THE DEVELOPMENT FROM VIEW BY THE ADJOINING RESIDENTIAL LAND, AND WHICH IS OF SUFFICIENT WIDTH TO BE NOISE ATTENUATING; AND
- d. THE CONSIDERATION OF DEDICATION OF OPEN LAND AREA FOR GREENWAY ADJOINING THE FLOODPLAIN* INCLUDING PORTIONS AT A SUITABLE ELEVATION FOR THE CONSTRUCTION OF A PEDESTRIAN/BICYCLE PATHWAY WITHIN THE FLOODPLAIN* IN ACCORDANCE WITH THE ADOPTED PEDESTRIAN BICYCLE PATHWAY PLAN.

3.2.4 THE CITY SHALL PROHIBIT DEVELOPMENT WITHIN AREAS DESIGNATED AS SIGNIFICANT WETLANDS ON THE FLOODPLAIN AND WETLANDS MAP. NO DEVELOPMENT SHALL OCCUR ON PROPERTY ADJACENT TO AREAS DESIGNATED AS SIGNIFICANT WETLANDS ON THE FLOODPLAIN AND WETLANDS MAP WITHIN TWENTY FIVE (25) FEET OF THE DESIGNATED WETLANDS AREA. DEVELOPMENT ON PROPERTY ADJACENT TO SIGNIFICANT WETLANDS SHALL BE ALLOWED UNDER THE PLANNED DEVELOPMENT SECTION OF THE CODE.

3.2.5 THE CITY SHALL REQUIRE THE CONSIDERATION OF DEDICATION OF ALL UNDEVELOPED LAND WITHIN THE 100-YEAR FLOODPLAIN PLUS SUFFICIENT OPEN LAND FOR GREENWAY PURPOSES SPECIFICALLY IDENTIFIED FOR RECREATION WITHIN THE PLAN.

* The Floodplain and Floodway, as defined by the Flood Insurance Study for the City of Tigard dated effective February 18, 2005.

(Rev. Ord. 05-01; Ord. 98-19; Ord. 90-22; Ord. 85-13; Ord. 84-36)

3.3 NATURAL RESOURCES

Findings

- Currently, there are extensive rock and gravel extraction areas located to the north and west of Tigard's planning area within Beaverton and Washington County.

(Rev. Ord. 01-07)

- There is one active mineral or aggregate resource within the Tigard Planning Area, known as the Durham Pits, which is operated by Washington County.

POLICY

- 3.3.1 THE CITY OF TIGARD SHALL SUPPORT THE EFFORTS OF WASHINGTON COUNTY, BEAVERTON AND THE METROPOLITAN SERVICE DISTRICT TO ENSURE THE AVAILABILITY OF THE ROCK MINERAL RESOURCES.

IMPLEMENTATION STRATEGY

1. The City shall encourage those jurisdictions regulating rock extraction to closely monitor the relationship between the demand for the resource and the amount of land planned for rock and gravel extraction and processing.

3.4 NATURAL AREAS

Findings

- There are a variety of plants, animals and water fowl within the Tigard planning area which add greatly to the quality of life within the community.
- Each species requires a complex and, often, a narrowly specific set of conditions with respect to food, water and vegetative cover or other natural features necessary for escape and reproduction.
- The significant plant communities and animal habitat areas are the riparian vegetation adjacent to the water resources in the community, and various stands of timber and brush.
- Development adjacent to existing wildlife areas can adversely affect these areas and in some instances can virtually eliminate these needed wildlife habitat areas.
- Vegetation contributes to the aesthetic quality of the community. Vegetation controls erosion, absorbs sound and moderates temperatures. It also affects the flow and moisture content of the air, reduction of air pollution and glare, and softens the impact of the urban environment.
- Statewide goal 5 requires local jurisdictions to inventory the location, quantity, and quality of resource sites located within their jurisdictions.
- The City has completed an inventory of the location and quantity of the wetland sites within its Active Planning Area. This inventory does not include information on the full range of functions and values of wetland areas as required by Goal 5 inventory standards.
- When adequate information is not available on a resource site, OAR 660-16-000 requires a local government to adopt a plan policy expressing its intent to address Goal 5 requirements relative to the site in the post acknowledgment period.

POLICIES

- 3.4.1 THE CITY SHALL DESIGNATE, IN ACCORDANCE WITH GOAL 5, THE FOLLOWING AS AREAS OF SIGNIFICANT ENVIRONMENTAL CONCERN.
- a. SIGNIFICANT WETLANDS;
 - b. AREAS HAVING EDUCATIONAL RESEARCH VALUE, SUCH AS GEOLOGICALLY AND SCIENTIFICALLY SIGNIFICANT LANDS; AND
 - c. AREAS VALUED FOR THEIR FRAGILE CHARACTER AS HABITATS FOR PLANTS, ANIMAL OR AQUATIC LIFE, OR HAVING ENDANGERED PLANT OR ANIMAL SPECIES, OR SPECIFIC NATURAL FEATURES, VALUED FOR THE NEED TO PROTECT NATURAL AREAS.

3.4.2 THE CITY SHALL:

- a. PROTECT FISH AND WILDLIFE HABITAT ALONG STREAM CORRIDORS BY MANAGING THE RIPARIAN HABITAT AND CONTROLLING EROSION, AND BY REQUIRING THAT AREAS OF STANDING TREES AND NATURAL VEGETATION ALONG NATURAL DRAINAGE COURSES AND WATERWAYS BE MAINTAINED TO THE MAXIMUM EXTENT POSSIBLE;
- b. REQUIRE THAT DEVELOPMENT PROPOSALS IN DESIGNATED TIMBERED OR TREE AREAS BE REVIEWED THROUGH THE PLANNED DEVELOPMENT PROCESS TO MINIMIZE THE NUMBER OF TREES REMOVED; AND
- c. REQUIRE CLUSTER TYPE DEVELOPMENT IN AREAS HAVING IMPORTANT WILDLIFE HABITAT VALUE AS DELINEATED ON THE "FISH AND WILDLIFE HABITAT MAP" ON FILE AT THE CITY.
- d. ADDRESS GOAL 5 RULE REQUIREMENTS PERTAINING TO THE PRESERVATION OF WETLANDS ONCE ADEQUATE INFORMATION ON THE LOCATION, QUALITY, AND QUANTITY OF WETLAND SITES IS OBTAINED. THIS GOAL 5 REVIEW WILL INCLUDE DETERMINING WHICH WETLAND SITES ARE ECOLOGICALLY AND SCIENTIFICALLY SIGNIFICANT. CITIZENS WILL PARTICIPATE IN MAKING POLICY RECOMMENDATIONS FOR THE PROTECTION AND PRESERVATION OF THOSE WETLAND AREAS DESIGNATED AS SIGNIFICANT. THE CITY SHALL COMPLETE ITS GOAL 5 REVIEW OF WETLAND AREAS BEFORE THE CITY'S NEXT PERIODIC REVIEW, BUT NO LATER THAN DECEMBER 23, 1996.

(Rev. Ord. 85-13; Ord. 93-30)

IMPLEMENTATION STRATEGIES

1. The City shall consider the inclusion of an adequate amount of land adjacent to a floodplain or drainageway for dedication to the City's natural greenway system, which allows the area to continue to support existing habitats.
2. The City shall encourage, through the Planned Development Process, the retention of large, varied habitat areas on private and public lands including inventoried plant and animal communities.
3. The City shall review all development proposals adjacent to wildlife habitat areas to ensure that adverse impacts on any wildlife habitat areas are minimized and, if need be, request that other federal, state and local agencies review the development proposals.
4. Where there exist large or unique stands of trees or major vegetation areas within the planning area on undeveloped land, the City shall ensure that development proposals do not substantially alter the character of the vegetation areas through the Planned Development Process and the "Tree Cutting" section of the Community Development Code.

3.5 PARKS, RECREATION AND OPEN SPACE

Findings

- In Tigard, public and private organizations can play an important role in providing leisure and recreational opportunities and cultural activities.
- Many of the Tigard School District sites provide recreational needs not found within many of Tigard's parks.
- Small parcels of unbuildable land resulting from urbanization can provide mini-parks or landscaped areas.
- A properly planned and managed system of open space and recreation lands can reduce the impact of urbanization and serve the leisure and aesthetic needs of all residents. The system needs to recognize the relationship between urban uses and the natural character of the land and drainageways.
- The community has indicated a desire for open space linkages which follow scenic routes and connect parks, schools, playgrounds, shopping areas, other public sites and residential areas.

- The City needs to develop an adequate system of open space, recreation lands and facilities to retain and improve livability of the community.
- In the process of planning for a park and recreation system, it is necessary to classify the individual components such as neighborhood parks and the greenway which will or could comprise the park system. In addition, the establishment of a reasonable acquisition and development program requires a listing of priorities and minimum levels of service to be provided. The actual development of such a system requires relating the provision of facilities and services to the particular needs and recreation desires of the residents to be served.

POLICIES

- 3.5.1 THE CITY SHALL ENCOURAGE PRIVATE ENTERPRISE AND INTERGOVERNMENTAL AGREEMENTS WHICH WILL PROVIDE FOR OPEN SPACE, RECREATION LANDS, FACILITIES, AND PRESERVE NATURAL, SCENIC AND HISTORIC AREAS IN A MANNER CONSISTENT WITH THE AVAILABILITY OF RESOURCES.
- 3.5.2 THE CITY SHALL COORDINATE WITH THE SCHOOL DISTRICTS TO DEVELOP RECREATIONAL FACILITIES.
- 3.5.3 THE CITY HAS DESIGNATED THE 100-YEAR FLOODPLAIN OF FANNO CREEK, ITS TRIBUTARIES, AND THE TUALATIN RIVER AS GREENWAY, WHICH WILL BE THE BACKBONE OF THE OPEN SPACE SYSTEM. WHERE LANDFILL AND/OR DEVELOPMENT ARE ALLOWED WITHIN OR ADJACENT TO THE 100-YEAR FLOODPLAIN, THE CITY SHALL REQUIRE THE CONSIDERATION OF DEDICATION OF SUFFICIENT OPEN LAND AREA FOR GREENWAY ADJOINING AND WITHIN THE FLOODPLAIN.
- 3.5.4 THE CITY SHALL PROVIDE AN INTERCONNECTED PEDESTRIAN/ BIKEPATH THROUGHOUT THE CITY.

(Rev. Ord. 98-19; Ord. 87-66; Ord. 84-36)

IMPLEMENTATION STRATEGIES

1. The Tigard Community Development Code shall require land divisions and major developments to set aside, dedicate land, or pay a fee in lieu of land aside based on standards, and the standards shall provide for:
 - a. An area composed of developable lands which may provide active recreation space; and
 - b. Adequate passive open space to protect natural resources at the site and protect development from hazard areas.
2. The City shall permit land which is set aside within developments to remain in private ownership provided:
 - a. Portions are sufficiently improved and maintained to offer active recreation opportunities;
 - b. They do not interfere with the continuity of or access to adjacent greenway lands; and
 - c. Easements transferring development rights are dedicated to the public.
3. The Tigard Community Development Code shall indicate flexible design options which mitigate the impacts of required open space and recreation land dedication or reservation.
4. The City shall designate natural park areas within a Tigard Master Parks Plan. The areas will have unique physical or aesthetic features and do not have to be developed to be of recreational use to the community. Areas which have special physical features such as natural watercourses, significant vegetation, scenic vistas, and that provide habitat for wildlife, will be considered.
5. Open space and greenways shall be used to enhance the accessibility to schools and parks by establishing a safe and well-marked trail system which will also connect with significant regional trail systems.
6. Park classifications and standards shall be adopted and a program developed for acquisition and

development of a park and open space system to ensure an adequate supply of usable open space and recreational facilities, directly related to the specific needs of the local residents.

7. Streets and drainageways shall be combined with a parkway or greenway concept to permit linkages between open spaces, residential areas, recreation lands and centers of economic activity.
8. The City shall continue to seek assistance of volunteer groups to assist in developing and maintaining parks.
9. Master plans for each park shall be developed. These plans shall identify facilities for each park and ensure development which promotes safe and aesthetically pleasing environments while minimizing the harmful effects of noise, air pollution, vehicular traffic and other negative aspects of urban life.
10. The City shall continue to implement the adopted bike plan by requiring development adjacent to the Greenway to construct their portion of the bikepath system.
11. To augment the scenic benefit of the greenway, the City shall establish the major vehicular transportation routes as scenic or visual corridors. The Park Board should plan and initiate a program (through public and private cooperation) for corridor landscape preservation and/or improvement. (Ord. 87-66)

3.6 PARK STANDARDS

Findings

- Currently, there are 128.90 acres of City park land in Tigard, 113.98 acres of dedicated greenway, and 1.71 miles of greenway trails.
- There are adopted plans for eight of the nine City parks.
- Although Scheckla Park has not been accepted by the Park Board, the land was dedicated to the City for park purposes.
- Due to recent cut backs in revenues to the City, the City has substantially limited its park maintenance program.
- The City's Park System Development Charge is acquired through new development and is used solely for park acquisition, development or major capital acquisition. Park maintenance is paid for through the City's general fund.

POLICIES

- 3.6.1 INDIVIDUAL PARK SITES, AS DEFINED BY THE PARKS AND OPEN SPACE STANDARDS AND CLASSIFICATION SYSTEM SHALL BE DEVELOPED ACCORDING TO THE FOLLOWING PRIORITIES:
- a. FACILITIES WITHIN A PARK WILL BE ADJUSTED TO MEET THE NEEDS AND DESIRES OF THE PARK SYSTEM DEVELOPMENT CHARGE (SDC) DISTRICT RESIDENTS AND THE CHARACTERISTICS OF THE SITE. PARK AND/OR RECREATIONAL FACILITIES IN GREATEST DEMAND AND LEAST SUPPLY SHOULD RECEIVE THE HIGHEST DEVELOPMENT PRIORITIES.
 - b. PARKS SHOULD BE PLANNED TO ENSURE MAXIMUM BENEFIT TO THE GREATEST NUMBER OF LOCAL RESIDENTS. FOR THIS REASON, ACQUISITION AND DEVELOPMENT OF COMMUNITY LEVEL PARKS SHOULD BE GIVEN THE HIGHEST PRIORITY.
 - c. DEVELOPMENT OF ADDITIONAL NEIGHBORHOOD PARKS WILL HAVE A LOWER PRIORITY FOR PUBLIC FUNDING AND ARE ENCOURAGED TO BE PROVIDED BY THE PRIVATE SECTOR WITHIN PLANNED UNIT DEVELOPMENTS AND MAINTAINED BY HOMEOWNERS ASSOCIATIONS.

- d. NEW MINI PARKS HAVE THE LOWEST DEVELOPMENT PRIORITY AND SHOULD BE SUPPLIED AT THE DEVELOPER'S OR NEIGHBORHOOD'S EXPENSE AND MAINTAINED BY A NEIGHBORHOOD ASSOCIATION CREATED AS PART OF THE DEVELOPMENT PROCESS.
- e. PROVISION OF REGIONAL PARK FACILITIES WILL ONLY BE CONSIDERED AS AN INTERJURISDICTIONAL PROJECT, AND SHOULD HAVE A LOW PRIORITY UNLESS UNUSUAL CIRCUMSTANCES ARISE.
- f. ACCEPTANCE OF ANY LAND DEDICATED FOR PARK PURPOSES SHALL BE BASED UPON ITS USEFULNESS AND ADAPTABILITY TO THE ADOPTED PARK AND OPEN SPACE SYSTEM.

3.6.2 THE CITY SHALL COORDINATE WITH OTHER PUBLIC, PRIVATE ORGANIZATIONS AND AFFECTED PRIVATE PROPERTY OWNERS IN ORDER TO FACILITATE THE IMPLEMENTATION OF THE CITY'S ADOPTED PARK PLANS.

IMPLEMENTATION STRATEGIES

1. The City shall continue to seek revenue sources to facilitate in the implementation of the adopted park plans. The adopted park plans are: Fanno Creek Park, Cook Park, Woodard Park, Jack Park, Summerlake Park, Englewood Park, Liberty Park and Ye Old Windmill Park.
2. The City shall develop a "future park needs assessment" to determine the number of acres needed for future park uses. The current park standards shall be used as a basis for this assessment. The future park needs assessment will specifically address community park needs.
3. As a precondition to development, the City's Community Development Code shall require the dedication of the greenway and park land, if not already dedicated.
4. The City shall continue to implement the adopted pedestrian/bikepath pathway plans.

3.7 HISTORICAL-CULTURAL RESOURCES

Findings

- Historic features provide a link with the past and add character and variety to the community design. Unfortunately, much of Tigard's heritage has already been lost to unmanaged development with only a few distinct structures remaining.
- The design of developments within the community can be regarded from two viewpoints; the design of structures as they relate to site and function (architectural design), and their relationship to the surrounding area (community design). Both aspects are of equal importance.
- Good architectural design is necessary to provide visual variety and allow for individual identity. At the same time, good community design provides a sense of unity with other development while eliminating conflicting appearances.

POLICY

3.7.1 THE CITY SHALL IDENTIFY AND PROMOTE THE PRESERVATION AND PROTECTION OF HISTORICALLY AND CULTURALLY SIGNIFICANT STRUCTURE, SITE, OBJECTS AND DISTRICTS WITHIN TIGARD.

IMPLEMENTATION STRATEGIES

1. To preserve the community's history, an index of historic sites shall be developed and made available to the general public. A program shall be developed to acquire and/or restore a number of historic structures identified as significant. The City should consider the renovation of a historic structure as an historic museum or cultural center and meeting hall such as Durham School, Ye Old Windmill and John Tigard Home.

4. AIR, WATER AND LAND RESOURCES QUALITY

This chapter addresses the concerns expressed by Statewide Planning Goal #6 which is:

"to maintain and improve the quality of the air, land and water resources of the state."

Environmental issues, throughout our nation and region, have produced an impressive list of agencies dealing with some aspect of our environment. Nationally, there is a confusing array of agencies, groups and departments, some working specifically in the realm of environment and many others who deal with environmental aspects only inasmuch as their main concern impinges on environmental areas of concern.

The National Environmental Protection Agency (EPA) and the State Environmental Quality Commission (EQC) are two agencies devoted to measurement, control and understanding of our environments. In addition, there are others that devote only a portion of their efforts to environmental qualities, provide technical assistance, grants and guidelines to local or regional agencies.

State and regional authority bring to bear more specific concerns and regulations regarding their jurisdictions, again with an impressive array of agencies and regulatory statements. Specifically impacting Tigard is Metro, which has responsibility for: air quality, water and solid waste treatment, regional land use coordination, transportation strategies and other areas of concern appropriate to an urban region.
(Rev. Ord. 02-15)

4.1 AIR QUALITY

Findings

- Within the Tigard Planning Area there are no major point source air polluters.
- The major source of air pollution in Tigard is automobile emissions.
- The City of Tigard lies within the Portland-Vancouver Interstate Air Quality Maintenance Area (AQMA). This area is described in the draft State Implementation Plan (SIP) for air quality, published jointly by the Department of Environmental Quality and the Metropolitan Service District in April, 1979. The draft State Implementation Plan (SIP) shows that the entire AQMA is in nonattainment for meeting the recently revised federal ambient air quality standards for ozone and is predicted to remain in nonattainment to at least 1987 unless additional control measures are undertaken. The final ozone control strategy for the Portland-Vancouver AQMA was adopted in July, 1982, and is predicted to bring the area into attainment with the standard by 1987.
- In the Portland - Vancouver AQMA, air pollution is monitored by and planning efforts coordinated through the Metropolitan Service District (MSD) and the Department of Environmental Quality (DEQ).
- The draft SIP also projects nonattainment in 1982 for CO (near Highway 99W). The final carbon monoxide control strategy of the Portland- Vancouver AQMA was adopted in July 1982. While the area in Tigard near Highway 99W is still a problem, modeling predicted that the area will be in attainment.
(Rev. Ord. 84-24)

POLICY

4.1.1 THE CITY SHALL:

- a. MAINTAIN AND IMPROVE THE QUALITY OF TIGARD'S AIR QUALITY AND COORDINATE WITH OTHER JURISDICTIONS AND AGENCIES TO REDUCE AIR POLLUTIONS WITHIN THE PORTLAND-VANCOUVER AIR QUALITY MAINTENANCE AREA. (AQMA).
- b. WHERE APPLICABLE, REQUIRE A STATEMENT FROM THE APPROPRIATE AGENCY, THAT ALL APPLICABLE STANDARDS CAN BE MET, PRIOR TO THE APPROVAL OF A LAND USE PROPOSAL.
- c. APPLY THE MEASURES DESCRIBED IN THE DEQ HANDBOOK FOR "ENVIRONMENTAL QUALITY ELEMENTS OF OREGON LOCAL COMPREHENSIVE LAND USE PLANS" TO LAND USE DECISIONS HAVING THE POTENTIAL TO AFFECT AIR QUALITY.

IMPLEMENTATION STRATEGIES

1. The City shall coordinate with Metro and DEQ to attain and maintain the air quality goal described in the State Implementation Plan (SIP).
2. The City shall continue to utilize expertise available at the Department of Environmental Quality, Metro, and other relevant agencies, to coordinate efforts aimed at reducing air pollution emission levels in the Tigard and entire Portland Metropolitan Area.
3. Until such time as control strategies are realized, the City of Tigard shall use measures described in the DEQ Handbook for "Environmental Quality Elements of Oregon Local Comprehensive Land Use Plans" when planning any development activities having the potential to directly (by direct emissions) or indirectly (by increasing vehicular travel) affect air quality.
4. The City shall make every effort to design municipal streets and roadways and to establish traffic flow patterns which minimize or reduce vehicular emissions.
5. The City shall consult and coordinate with the Oregon Department of Environmental Quality to ensure that land uses and activities in Tigard comply with Federal and State air quality standards.
6. The City shall aim to reduce the quantity of vehicle emissions by pursuing an energy-efficient urban form which reduces the number of vehicle miles traveled, and by encouraging the use of alternate modes of transportation, especially mass transit and pedestrian.

(Rev. Ord. 02-15)

4.2 WATER QUALITY

Findings

- The quality of Tigard's surface waters are fair, inasmuch as the waters are not used for drinking purposes.
- No major point source water polluters threaten local creeks.
- Some infiltration problems exist in the sewage systems.
- Reduction of open space, removal of vegetation cover, and development which increases the amount of impervious surface all contribute significantly to increases in the peak flows of urban storm runoff entering storm sewers, creeks and drainageways.
- Offsetting measures can reduce the negative effects of urban development on water quality and quantity problems. Examples include on-site retention/ detention of storm water, inclusion of landscape buffer areas adjacent to new development and conservation and improvement of streamside vegetation along creeks and other water courses.
- Clean Water Services (CWS) is the lead agency for water quality management within Washington County.
- By intergovernmental agreement, all the cities within the Clean Water Services' service area, Tigard included, must follow the standards contained in the CWS's Design and Construction Manual.

(Rev. Ord. 02-15)

POLICIES

- 4.2.1 ALL DEVELOPMENT WITHIN THE TIGARD URBAN PLANNING AREA SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND REGIONAL WATER QUALITY STANDARDS, INCLUDING THOSE CONTAINED IN THE CLEAN WATER SERVICES' DESIGN AND CONSTRUCTION MANUAL. (Rev. Ord. 02-15)
- 4.2.2 THE CITY SHALL RECOGNIZE AND ASSUME ITS RESPONSIBILITY FOR OPERATING, PLANNING, AND REGULATING WASTEWATER SYSTEMS AS DESIGNATED IN METRO'S WASTE TREATMENT MANAGEMENT COMPONENT. (Rev. Ord. 02-15)

IMPLEMENTATION STRATEGIES

1. In order to improve the water quality and quantity in the Tigard Area, the City shall consider developing regulations in the Tigard Community Development Code or instituting programs to:
 - a. Increase public awareness of techniques and practices private individuals can employ to help correct water quality problems;
 - b. Improve the management of industrial and commercial operations to reduce negative water quality impacts;
 - c. Regulate site planning for new development and construction through the Tigard Community Development Code to better control drainages and erosion and to manage storm runoff;
 - d. Increase storage and retention of storm runoff to lower and delay peak storm flows;
 - e. Reduce street related water quality and quantity problems; and
 - f. Increase public awareness concerning the use and disposal of toxic substances.
2. The City shall not permit industrial or other uses which violate State of Oregon water quality discharge standards.
3. The City shall cooperate with the Metro and other appropriate agencies to establish practices which minimize the introduction of pollutants into ground and surface waters.
4. The City shall require that new developments obtain a Stormwater Connection permit from Clean Water Services and be connected to the City's or the Clean Water Services sanitary sewerage systems.

4.3 NOISE POLLUTION

Findings

- Noise is a recognized cause of physical and psychological stress which has been directly related to various health problems.
- Motor vehicle traffic noise is the major contributor to the ambient noise level in Tigard.
- Noise levels for almost all residential districts in Tigard appear to be within acceptable levels.
- The highest noise levels appear to be found along Pacific Highway (99W), Main Street, I-5, Hwy. 217 and Hall Boulevard.
- Effective control of the undesirable effects of highway generated noise levels requires a three part approach: 1) source emission reduction; 2) improved highway design and street design; and 3) land use controls. The first two components are currently being addressed by private industry and by federal, state and regional agencies. The third area is essentially a local government responsibility.

POLICY

4.3.1 THE CITY SHALL:

- a. REQUIRE DEVELOPMENT PROPOSALS LOCATED IN A NOISE CONGESTED AREA OR A USE WHICH CREATES NOISE IN EXCESS OF THE APPLICABLE STANDARDS TO INCORPORATE THE FOLLOWING INTO THE SITE PLAN:
 1. BUILDING PLACEMENT ON THE SITE IN AN AREA WHERE THE NOISE LEVELS WILL HAVE A MINIMAL IMPACT; OR
 2. LANDSCAPING AND OTHER TECHNIQUES TO LESSEN NOISE IMPACTS TO LEVELS COMPATIBLE WITH THE SURROUNDING LAND USES.
- b. COORDINATE WITH DEQ IN ITS NOISE REGULATION PROGRAM AND APPLY THE

DEQ LAND USE COMPATIBILITY PROGRAM.

- c. WHERE APPLICABLE REQUIRE A STATEMENT FROM THE APPROPRIATE AGENCY (PRIOR TO THE APPROVAL OF A LAND USE PROPOSAL) THAT ALL APPLICABLE STANDARDS CAN BE MET.

IMPLEMENTATION STRATEGIES

1. The Tigard Community Development Code shall ensure that future "noise sensitive" developments are designed and located so as to minimize the intrusion of noise from motor vehicle traffic and/or neighboring noisy uses.
2. The Tigard Community Development Code shall ensure that new commercial, industrial and public developments are landscaped and designed such that Department of Environmental Quality (DEQ) noise standards are met and neighboring "noise sensitive" properties are not negatively impacted by the new land use or associated activities. This shall be accomplished through building setbacks, buffering standards and use compatibility.
3. The City shall seek a response and/or assistance from the Department of Environmental Quality (DEQ) when reviewing commercial or industrial uses in or near residential areas to prevent degradation of previously quiet environments.

4.4 LAND RESOURCES

Findings

- Solid waste disposal is a regional concern requiring regional solutions.
- Land quality in Tigard is not currently threatened by a large - scale waste disposal site.
- Normal human activity and economic processes in Tigard contribute to the quantity of regional waste disposal.
- The Metropolitan Service District (MSD) has the authority to provide solid and liquid waste disposal in the metropolitan area.
- Although MSD has the authority over solid waste site location, local governments will be involved in the selection process.

POLICIES

- 4.4.1 THE CITY SHALL MAINTAIN AND IMPROVE, IF POSSIBLE, THE CURRENT QUALITY OF TIGARD'S LAND RESOURCES.
- 4.4.2 THE CITY SHALL RECOGNIZE MSD'S RESPONSIBILITY AND AUTHORITY TO PREPARE AND IMPLEMENT A SOLID WASTE MANAGEMENT PLAN.

IMPLEMENTATION STRATEGIES

1. The City shall actively participate with the Metropolitan Service District (MSD) and the Department of Environmental Quality (DEQ), in the solid waste site selection process.
2. The City shall discourage solid waste sites which would adversely affect neighboring land uses or which are unsuitable because of natural conditions at the site, including but not limited to:
 - a. Depth to water table;
 - b. Soil conditions;

- c. Impacts upon drainage;
 - d. Water quality degradation or similar problems.
3. The City shall ensure that future land use activities with significant waste and process discharges conform to all State and Federal environmental quality standards.
 4. The City shall seek a response or assistance from the Department of Environmental Quality or any other interested State or Federal agency when reviewing proposed land uses with potential for significant waste and process discharges.
 5. The City shall continue to use local recycling services and shall encourage and cooperate with all recycling agencies which conform to all state and federal environmental quality standards.
 6. The City shall recognize MSD's role in preparing and implementing a solid waste management plan. The City shall support MSD's "Procedures for Siting Sanitary Landfill," and will participate in these procedures as appropriate.

5. ECONOMY

This report addresses LCDC Statewide Planning Goal #9 requirements titled "Economy of the State." The recommended findings and policies have been developed to blend Tigard's individual economic programs into those of the region and State to meet Goal #9 requirements.

The Goal #9 statement reads:

"To diversify and improve the economy of the State.

Both State and federal economic plans and policies shall be coordinated by the State with local and regional needs. Plans and policies shall contribute to a stable and healthy economy in all regions of the State. Plans shall be based on inventories of areas suitable for increased economic growth and activity after taking into consideration the health of the current economic base; materials and energy availability; labor market factors; availability of renewable and non-renewable resources; availability of land; and pollution control requirements.

Economic growth and activity in accordance with such plans shall be encouraged in areas that have underutilized human and natural resource capabilities and want increased growth and activity. Alternative sites suitable for economic growth and expansion shall be designated in such plans."

Findings

Through analysis of the economic conditions which affect Tigard, the existing make up of the community, the potential for growth, and the City's interest in assisting existing and new businesses to expand in and relocate to Tigard, the following findings were identified.

- The City of Tigard is an important economic and employment center within the Portland metropolitan economic region.
- The economic climate of the City, in part, is subject to the influences of external economic forces beyond the control of the City.
- The City continues to experience thriving commercial and industrial growth.
- In spite of continued growth and prosperity and a healthy economy overall, economic growth has had very uneven spatial impacts within the community. In particular, comparatively little new economic activity has occurred in the city center, Tigard Triangle, and 74th Avenue Corridor areas.
- Tigard has not had to induce development with financial or other incentives.
- Tigard is recognized as having clear and consistent development review standards and an efficient and well-coordinated City review process.
- A significant amount of commercial buildable land is available for development. Most of this land is concentrated in the Tigard Triangle area.
- A core problem facing the City is lack of buildable land designated for industrial use.
- The City's large industrial parks provide an ample supply of leasable space for smaller and younger industries.
- Wholesale and retail activities provide the majority of the local employment opportunities to area residents.
- An increasing regional dependence on electrical, electronic and instrument related manufacturing employment has occurred in recent years.
- There is a need for new and expanded public facilities to open areas for industrial and commercial uses. This particularly applies to the Tigard Triangle commercial and the 74th Avenue industrial areas.
- A computerized database of comprehensive and up-do-date economic data, particularly that relating to sites available for development purposes, is expected to be available from late-1990.

- The Central Business District demands attention and community support in order that improvement programs may be set in motion to make it a more diversified and economically viable core area.
- The existing railroad facilities in Tigard are utilized by some businesses located on property adjacent to the rails.
- Proximity to I-5 and Highway 217 serve as incentives to economic development in Tigard.
- Tigard's proximity to Portland Community College provides opportunity for the creation of specialized job training programs to serve existing, expanding and new industries in the City.
- Recognizing that liveability is an important component of economic development, a need exists for more local cultural and recreational opportunities to maintain and enhance Tigard's quality of life.
- Attractiveness or amenity of a particular area is an important factor influencing location decisions for new private sector investment.
- New water quality standards for the Tualatin River will increase the attractiveness of the river for water-based recreational activities.
- New water quality standards together with various increased development fees imposed at various times since 1983 have increased the cost of developing land.
- Traffic congestion in some designated commercial and industrial areas has been detrimental to economic development. (Rev. Ord. 91-01)

POLICIES

- 5.1 THE CITY SHALL PROMOTE ACTIVITIES AIMED AT THE DIVERSIFICATION OF THE ECONOMIC OPPORTUNITIES AVAILABLE TO TIGARD RESIDENTS WITH PARTICULAR EMPHASIS PLACED ON THE GROWTH OF THE LOCAL JOB MARKET.
- 5.2 THE CITY SHALL WORK WITH WASHINGTON COUNTY AND ADJACENT JURISDICTIONS TO DEVELOP AN ECONOMIC DEVELOPMENT PLAN INCORPORATING A LOCAL ECONOMIC DEVELOPMENT PLAN.
- 5.3 THE CITY SHALL IMPROVE AND ENHANCE THE PORTIONS OF THE CENTRAL BUSINESS DISTRICT AS THE FOCAL POINT FOR COMMERCIAL, HIGH DENSITY RESIDENTIAL, BUSINESS, CIVIC AND PROFESSIONAL ACTIVITY CREATING A DIVERSIFIED AND ECONOMICALLY VIABLE CORE AREA.
- 5.4 THE CITY SHALL ENSURE THAT NEW COMMERCIAL AND INDUSTRIAL DEVELOPMENT SHALL NOT ENCROACH INTO RESIDENTIAL AREAS THAT HAVE NOT BEEN DESIGNATED FOR COMMERCIAL OR INDUSTRIAL USES.
- 5.5 THE CITY SHALL PROHIBIT RESIDENTIAL DEVELOPMENT IN COMMERCIAL AND INDUSTRIAL ZONING DISTRICTS EXCEPT:

COMPLIMENTARY RESIDENTIAL DEVELOPMENT SHALL BE PERMITTED ABOVE THE FIRST FLOOR IN THE CENTRAL BUSINESS DISTRICT, AND ABOVE THE SECOND FLOOR IN COMMERCIAL PROFESSIONAL DISTRICTS. (THE DENSITY OF RESIDENTIAL DEVELOPMENT SHALL BE DETERMINED IN ACCORDANCE WITH THE R-40 DISTRICTS.) AND;

EXISTING SINGLE FAMILY HOMES WITHIN THE MIXED USE EMPLOYMENT ZONE SHALL BE CONSIDERED PERMITTED USES AND NEW MULTI-FAMILY DEVELOPMENT SHALL BE PERMITTED AND ENCOURAGED TO DEVELOP AT R-40 DENSITIES;

WITHIN THE MUC, MUR 1 AND 2 AND MUE 1 AND 2 ZONES WITHIN THE WASHINGTON SQUARE REGIONAL CENTER, WHERE RESIDENTIAL USES SHALL BE PERMITTED AND ENCOURAGED AT HIGH DENSITIES RANGING FROM R-25 (MUE 2 AND MUR 2) TO R-50 (MUC, MUE 1 AND MUR 1): AND

WITHIN THE MUC-1 DISTRICT, WHERE RESIDENTIAL USES SHALL BE PERMITTED AND ENCOURAGED TO DEVELOP AT A MINIMUM OF 25 UNITS PER ACRE TO A MAXIMUM OF 50 UNITS PER ACRE. RESIDENTIAL USES WHICH ARE DEVELOPED ABOVE NON-RESIDENTIAL USES AS PART OF A MIXED USE DEVELOPMENT SHALL NOT BE SUBJECT TO THESE DENSITIES.

(Rev. Ord. 01-07 & 02-12)

- 5.6 THE CITY SHALL CONSIDER PRIVATE FINANCING BY PRIVATE DEVELOPERS IN COORDINATION WITH AVAILABLE BONDING METHODS TO PROVIDE PUBLIC FACILITIES TO COMMERCIAL AND INDUSTRIAL LAND DESIGNATED ON THE COMPREHENSIVE PLAN MAP.

IMPLEMENTATION STRATEGIES

1. The City's Community Development Code shall incorporate any revisions needed to remove unnecessary obstacles which may deter new economic activities.
2. In the process of administering the City's Comprehensive Plan, careful consideration shall be given to the economic implications of all proposed policies, programs and regulations.
3. The City shall cooperate with the I-5 Association, the Tualatin Valley Economic Corporation, Washington County and other tiers of government on economic development activities.
4. The City, along with the business community, shall develop an economic development program aimed at attracting new commercial and industrial development to Tigard while also encouraging the expansion of existing business concerns.
5. The City shall participate in the formulation and implementation of a regional economic development program for the Washington County area.
6. The City shall continue to maintain and expand its comprehensive data base of demographic and economic information.
7. The City shall work cooperatively with the business community seeking its involvement and advice when working toward arriving at decisions having economic implications for the business community.
8. The City shall target efforts to strategic areas for growth and diversification. Specific areas include the Central Business District, the Tigard Triangle, and the 74th Avenue Industrial area.
9. The City shall concentrate resources for the revitalization of the Central Business District utilizing Local Improvement Districts and a program to encourage private investment.
10. The City shall encourage new development by allowing more flexible zoning standards within the CBD than are allowed citywide.
11. The City shall develop a master plan and financial scheme for development of the Tigard Triangle area.
12. The City shall designate SW 74th Avenue between Bonita and Durham as a special study area. Issues to be addressed include the exact location of land in floodplain, the feasibility of channelizing sections of the creek flowing through the area, and the feasibility of actively marketing suitable sites for industrial development.
13. The City shall develop and implement an economic development program compatible with the potentials and constraints of the City and will:
 - a. Aid in the creation and maintenance of new and continuous employment opportunities to afford City residents the choice of working within the City;
 - b. Strive to improve, diversify and stabilize the economic base of the community thus reducing the tax burden of the residential property owner;
 - c. Aid in the effective utilization of the land, energy and human resources; and
 - d. Provide for the timely development of all public facilities and services and their delivery systems.

14. The City shall encourage the location and development of economic activities which meet the occupational and employment needs of all City residents, particularly the unemployed and underemployed.
15. The Community Development Code shall limit development on lands planned for commercial use to commercial uses. Residential uses will be allowed above the first floor in selected zones.
16. The City shall complete the compilation of an automated inventory which identifies all parcels of land zoned for commercial or industrial purposes and which identifies:
 - a. The amount and type of development on the land, if any;
 - b. The name of the owner;
 - c. The public services which are available to the site;
 - d. The current zoning designation; and
 - e. The assessed value.
17. The City shall maintain development codes which describe standards for landscaping and buffering where commercial and industrial uses abut residential districts.
18. The City shall work with Portland Community College to develop training programs as an incentive to new industries locating in Tigard needing a trained labor force.
19. The City shall coordinate its planning efforts with the Metropolitan Service District and Oregon Department of Transportation to ensure adequate access from major arterial routes to designated commercial and industrial areas.
20. The City shall encourage private landowners to consider utilizing available bonding methods, in addition to private financing methods, to provide public facilities to vacant buildable lands with the potential for industrial or commercial development.
21. The City should not preclude any financing mechanism for the implementation of its economic development objectives.
22. The City shall continue to demonstrate support for local industry Business Development Fund and Industrial Revenue bond applications for low interest financing.
23. The City shall apply for state lottery dollars for economic development projects where appropriate.
24. Within the framework of community priorities and resources, the City shall identify and apply for available park improvement and community development grants.
25. The City shall support quality of life improvements, including private sector projects that improve cultural and recreational opportunities.
26. Because highway accessibility to designated commercial and industrial areas is more important than access by any other means, the City shall actively endeavor to protect and enhance access to Highway 217 and Interstate 5.
27. Because access within an area is a significant determinant of economic location, the City shall develop and put into effect measures to reduce traffic congestion.
28. The City shall investigate ways to make Pacific Highway more visually attractive and less congested. These ways could include sidewalk, landscape, and other improvements aimed at creating more of a boulevard effect for the highway. They also could include the implementation of transportation management techniques; the adoption of site access and parking lot controls; the accomplishment, in coordination with Tri-met, of a transit improvement program; the demonstration of support for the development of a light rail line extending from downtown Portland to Tigard along Pacific Highway; and other programs and projects aimed at improving traffic circulation.
29. The City shall improve the City's economic base by encouraging development of targeted industries. (Rev. Ord. 91-01)

6. HOUSING

This chapter considers the land and the dwelling units where Tigard residents live. Residential land uses occupy more land area than any other land use in the City.

This chapter addresses the Statewide Planning Goal #10:

"To provide for the housing needs of the citizens of the State."

The plan policies focus on five basic areas: 1) Housing needs; 2) Housing costs; 3) Established residential areas; 4) Housing conditions; and 5) Urban Expansion.

Detailed information concerning housing in Tigard is available in the "Comprehensive Plan Report: Housing."

6.1 HOUSING NEEDS

Findings

- Residential housing in Tigard has been developed as 55.6% single family detached dwellings, 42.7% attached units, and 1.7% manufactured homes.
- The Metropolitan Housing Rule adopted by the Land Conservation and Development Commission states that Tigard must provide for 50% single family and at least 50% single family attached or multiple family units with a minimum of 10 units to the net acre. The Metro Housing Rule applies to only vacant buildable land within Tigard's Urban Planning Area, and does not affect established and developed residential areas.
- The rapid increase in housing and land costs over the last several years has excluded many households from obtaining suitable housing to meet their needs.
- Many of the households that do not desire or are unable to afford conventional single family detached dwellings rely on the rental market or attached dwellings to meet their housing needs.
- The rapidly changing housing market will require the City to periodically reevaluate its housing and land use objectives to provide for a variety of housing types and densities to meet the needs of future residents.
- Approximately 19% of the households in Tigard are inhabited by senior citizens.
- Undue concentrations of public assisted or subsidized housing serves to isolate the recipients of such housing from the mainstream of the community, its full range of basic services and the diversity of its neighborhoods. For this reason, the City should take steps to disperse such housing within individual neighborhoods and throughout the City itself.

POLICY

- 6.1.1 THE CITY SHALL PROVIDE AN OPPORTUNITY FOR A DIVERSITY OF HOUSING DENSITIES AND RESIDENTIAL TYPES AT VARIOUS PRICES AND RENT LEVELS.

(Rev. Ord. 85-03; Ord. 84-38; Ord. 84-29; Ord 96-24)

IMPLEMENTATION STRATEGIES

1. The City shall monitor the rate of development through an annual "land survey," which will function as an up-to-date inventory of land available for future residential needs.
2. The Tigard Community Development Code shall list a broad range of zoning districts which allow for a variety of housing types, and comply with the adopted Metropolitan Housing Rule (50-50 mixture of single family and attached or multiple family at 10 units to the net acre on buildable vacant land).

3. The Tigard Community Development Code, through the Planned Development process, shall establish a procedure to allow properties exhibiting physical constraint characteristics, e.g., steep slopes or floodplains, to develop with density transfers allowable on the site.

In addition, the City shall encourage developers to use the planned development process in all developing areas.
4. The City shall allow for manufactured homes in all residential zoning districts.
5. The City shall encourage housing development to occur, to the greatest extent possible, on designated buildable lands in areas where public facilities and services can be readily extended to those lands.
6. The City shall provide for opportunities for proposals to develop specialized housing for the area's senior citizens and handicapped based on the needs of these groups by:
 - a. Making information available on subsidizing programs;
 - b. Allowing special use housing for these groups in all development districts;
 - c. Requiring the needs of the handicapped to be considered as a part of the Site Design Review process.
7. The City shall coordinate with the Washington County Housing Authority, private non-profit housing corporations, H.U.D. and other Federal, State and regional agencies for the provision of subsidized housing programs in Tigard.
8. The City shall determine through census figures, surveys and organizational reports, such as those prepared by the area Agency on Aging, the extent of the City's need and projected need in the area of low and moderate income housing, senior housing and specialty housing. The City shall encourage the development of such housing types to meet the identified and projected needs.
9. The City shall maintain its long standing intergovernmental agreement with the Washington County Housing Authority that, among other provisions, emphasizes the supply of new Authority-owned affordable housing at dispersed sites within the community.
10. The City shall establish a fee subsidy program intended to offset fees and charges imposed on affordable housing development. The guidelines for the award of the competitive funds shall give high consideration to projects that facilitate the dispersal of affordable housing within the City.
11. The City shall encourage maintenance of a sufficient regional residential land supply.

(Rev. Ord. 04-09)

6.2 HOUSING COSTS

Findings

- The factors that have contributed to increasing housing costs are materials, labor, land costs, financing and regulation costs. (The average sales price of a new single family home increased from \$22,700 in 1970 to \$45,000 in 1976, to over \$76,000 in 1980.)
- Land and regulation costs have dramatically increased the cost of development.
- Construction costs may be reduced by building smaller units and using alternative construction techniques.
- Excessive regulation costs can be reduced by simplifying the application process and reducing unnecessary development standards.
- Financing costs of residential units cannot be controlled by the City of Tigard; however, the City can assist in public facilities and services development through financing mechanisms.

POLICY

- 6.2.1 THE CITY SHALL DEVELOP CLEAR AND CONCISE DEVELOPMENT REGULATIONS AND STANDARDS TO FACILITATE THE STREAMLINING OF DEVELOPMENT PROPOSALS, AND WILL ELIMINATE UNNECESSARY PROVISIONS WHICH COULD INCREASE HOUSING COSTS WITHOUT CORRESPONDING BENEFIT.

IMPLEMENTATION STRATEGIES

1. The City shall review, revise and update the land division, zoning and sign codes. The corresponding document will be grouped in a single code and identified as the Tigard Community Development Code.
 2. The Tigard Community Development Code shall include clear and concise processes for the review and approval of development proposals, to the degree that the quality of the review process is not adversely affected. This will be accomplished by, but not limited to:
 - a. Administrative procedures;
 - b. Application forms; and
 - c. Clear and concise standards for each development process.
 3. The City shall seek ways to minimize the cost of housing by encouraging a variety of home ownership alternatives such as, but not limited to, townhouses and condominiums.
 4. The City shall continue to support the development of traditional housing types such as single family detached dwellings, duplexes and apartments.
 5. The City shall encourage geographic flexibility in the choice of housing.
- 6.3 ESTABLISHED RESIDENTIAL AREAS (**REPEALED BY ORDINANCE 98-19 dated 8/25/98**)

6.5 HOUSING CONDITIONS

Findings

- A majority of the City's existing units have been built since 1960; and in general, these units are in good condition.
- Most of the upkeep on these structures involves minor mechanical problems, weatherization and painting.
- The City currently does not have any rehabilitation programs for those residential structures that need major repairs. The Washington County Community Action Organization (WCCAO) does administer a weatherization program funded by the federal government to assist low income residents. Other residents of Tigard may rely on federal and State tax incentives for weatherization, as those incentives are available. As many of the existing 20 year-old homes age, more repair and rehabilitation work may be needed in order to maintain the high quality of residential structures that now exist.
- The Washington County Community Development Office operates a Home Repair Program funded by the Federal Government to assist low and moderate income homeowners. The Housing Authority of Washington County operates a Multi-Family Rental Rehabilitation Program funded by the Federal Government, to assist units occupied by low and moderate income tenants.

(Rev. Ord. 04-09)

POLICY

6.5.1 THE CITY SHALL REQUIRE THAT ALL HOUSING UNITS BE:

- a. CONSTRUCTED ACCORDING TO THE OREGON UNIFORM BUILDING CODE OR OTHER APPLICABLE STATE OR FEDERAL STRUCTURAL CODES; AND
- b. MAINTAINED IN A MANNER WHICH DOES NOT VIOLATE THE CITY'S NUISANCE OR PROPERTY MAINTENANCE REGULATIONS.

IMPLEMENTATION STRATEGIES

1. The Tigard Community Development Code will establish a Site Development Review, Conditional Development and Planned Development process in which to review development proposals.
2. The City will continue to administer the Uniform Building Code on all applicable types of construction in Tigard.
3. In order to insure continued safe and sanitary housing, the City shall develop a Residential Property Maintenance Code and assign a Housing Inspector to administer it.
4. To assist residents who need financing for home repairs, the City shall encourage residents to utilize the various low interest loan and grant programs offered by the Washington County Office of Community Development through its Housing Rehabilitation Program.
5. The City will enforce, where feasible, all nuisance ordinances that relate to site appearances. The City also will enforce all ordinances that relate to structural soundness. The City will encourage private property owners to comply with all nuisance and structural ordinances which will alleviate the financial burden of the City, and its taxpayers to enforce these ordinances.
6. The City will set reasonable rules in the Tigard Community Development Code for accessory buildings which will protect the character of existing residential neighborhoods.

(Rev. Ord. 04-09)

6.6 ALL AREAS

POLICY

6.6.1 THE CITY SHALL REQUIRE:

- a. BUFFERING BETWEEN DIFFERENT TYPES OF LAND USES (FOR EXAMPLE BETWEEN SINGLE FAMILY RESIDENTIAL AND MULTIPLE FAMILY RESIDENTIAL, AND RESIDENTIAL AND COMMERCIAL USES, AND RESIDENTIAL AND INDUSTRIAL USES) AND THE FOLLOWING FACTORS SHALL BE CONSIDERED IN DETERMINING THE TYPE AND EXTENT OF THE REQUIRED BUFFER:
 1. THE PURPOSE OF THE BUFFER, FOR EXAMPLE TO DECREASE NOISE LEVELS, ABSORB AIR POLLUTION, FILTER DUST OR TO PROVIDE A VISUAL BARRIER;
 2. THE SIZE OF THE BUFFER NEEDED IN TERMS OF WIDTH AND HEIGHT TO ACHIEVE THE PURPOSE;
 3. THE DIRECTION(S) FROM WHICH BUFFERING IS NEEDED;
 4. THE REQUIRED DENSITY OF THE BUFFERING; and
 5. WHETHER THE VIEWER IS STATIONARY OR MOBILE.

- b. ON-SITE SCREENING OF SUCH THINGS AS SERVICE AREAS AND FACILITIES, STORAGE AREAS AND PARKING LOTS, AND THE FOLLOWING FACTORS, SHALL BE CONSIDERED IN DETERMINING THE TYPE AND EXTENT OF THE SCREENING:
 - 1. WHAT NEEDS TO BE SCREENED;
 - 2. THE DIRECTION FROM WHICH IT IS NEEDED;
 - 3. HOW DENSE THE SCREEN NEEDS TO BE; AND
 - 4. WHETHER THE VIEWER IS STATIONARY OR MOBILE.
 - 5. WHETHER THE SCREENING NEEDS TO BE YEAR ROUND.

7. PUBLIC FACILITIES AND SERVICES

The continued increased growth in population for the Tigard Planning area will require a corresponding expansion of public facilities and services. Policies concerning the manner in which public facilities are expanded can help direct the location and intensity of future housing, commercial and industrial development.

Statewide Planning Goal #11 specifically speaks to this concern. It directs jurisdictions

"to plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban development."

The findings, policies and implementation strategies of this chapter address general issues related to public facilities and services as well as issues concerning water, sewage disposal, police and fire protection, schools, health services and local government facilities to name a few.

Detailed information related to public facilities and services is available in the "Comprehensive Plan Report: Public Facilities and Services," and a variety of facilities master plans and background reports developed by or for the City.

7.1 GENERAL

Findings

- Community goals emphasize the desire to maintain the high quality of facilities and services within the City.
- The community's facilities and services are an important management tool in the conservation and development of land within the urban planning area.
- Plans and programs need to be developed for the expansion of urban services in a logical and orderly manner. This should include a funded and effective capital improvement program.
- Phasing adequate public facilities and services to support residential development is necessary to meet community needs.
- The City of Tigard and related service districts have the duty, within their means, to provide adequate services to meet the demand for all development within the planning area during the planning period.
- Phasing the facilities expansion is necessary for orderly growth.
- Formation of private utility districts (water, sewer) could create land management problems within the Urban Planning Area.
- A capital improvements program would facilitate the coordination and expansion for providing transportation, utilities and other public facilities.

POLICIES

7.1.1 THE CITY SHALL:

- a. PREPARE AND IMPLEMENT A CAPITAL IMPROVEMENTS PROGRAM IN CONJUNCTION WITH WASHINGTON COUNTY AND THE APPLICABLE SERVICE DISTRICTS;
- b. WORK WITH THE SERVICE DISTRICTS TO PROVIDE A COORDINATED SYSTEM FOR PROVIDING SERVICES;
- c. PROVIDE URBAN SERVICES IN ACCORDANCE WITH THE COMPREHENSIVE PLAN TO THE EXTENT OF THE CITY'S FINANCIAL RESOURCES;

- d. USE THE CAPITAL IMPROVEMENTS PROGRAM AS A MEANS FOR PROVIDING FOR ORDERLY GROWTH AND THE EFFICIENT USE OF LAND;
- e. DEVELOP A COMPREHENSIVE PLAN WITH CONSIDERATION BEING GIVEN TO THE LEVEL AND CAPACITY OF THE EXISTING SERVICES; AND
- f. ADOPT LOCATIONAL CRITERIA AS THE BASIS FOR MAKING DECISIONS ABOUT THE PROPER LOCATION FOR PUBLIC FACILITIES.

7.1.2 THE CITY SHALL REQUIRE AS A PRE-CONDITION TO DEVELOPMENT APPROVAL THAT:

- a. DEVELOPMENT COINCIDE WITH THE AVAILABILITY OF ADEQUATE SERVICE CAPACITY INCLUDING:
 - 1. PUBLIC WATER;
 - 2. PUBLIC SEWER SHALL BE REQUIRED FOR NEW DEVELOPMENT WITHIN THE CITY UNLESS THE PROPERTY INVOLVED IS OVER 300 FEET FROM A SEWER LINE AND WASHINGTON COUNTY HEALTH DEPARTMENT APPROVAL FOR A PRIVATE DISPOSAL SYSTEM IS OBTAINED; AND
 - 3. STORM DRAINAGE.
- b. THE FACILITIES ARE:
 - 1. CAPABLE OF ADEQUATELY SERVING ALL INTERVENING PROPERTIES AND THE PROPOSED DEVELOPMENT; AND
 - 2. DESIGNED TO CITY STANDARDS.
- c. ALL NEW DEVELOPMENT UTILITIES TO BE PLACED UNDERGROUND.

(Rev. Ord. 86-08)

IMPLEMENTATION STRATEGIES

- 1. As a part of the ongoing planning program, the City will prepare a capital improvements program; and
 - a. The staging of facilities will be based on the availability of financial resources;
 - b. Priorities will be based on considerations of:
 - 1) Health and safety factors;
 - 2) Cost-benefit factors; and
 - 3) Social and economic needs.
 - 2. As a part of the Community Development Code, standards will be included in:
 - a. The Land Division Ordinance for the construction of services; and
 - b. The Community Development Code which requires future subdivision plans in areas where allowed densities due to a lack of services are less than the plan densities.
 - 3. Where sewer is not available to site, the developer shall be required to extend the services to the site at the developer's cost. The City shall adopt an ordinance providing for partial cost as intervening parcels are developed by the intervening landowners.
 - 4. The Tigard Community Development Code shall establish an ordinance which indicates:
 - a. That services shall be extended from property line to property line, including services located in adjacent rights-of-way; except
 - b. That the ordinance shall allow for the phasing of such services if a development proposal
-

indicates such phasing.

The intent of these policies is to develop a mechanism for an orderly and logical development and expansion of services to promote an efficient use of land and thus an efficient growth pattern. This mechanism will basically be concerned with: Planning for public facilities in advance of need in a manner which will implement land use policy. This shall help direct the urban expansion and growth.

7.2 STORM DRAINAGE AND WASTEWATER MANAGEMENT

Findings

- The major drainage problem in Tigard is the storm-water runoff throughout the area.
- The primary water quantity problem is overbank flooding that occurs when storm-water quantity exceeds channel capacity.
- CH₂M Hill, Inc. developed a "Master Drainage Plan" for the City in 1981, which incorporates existing storm-water detention and subdivision procedures and standards with the recommended changes to the existing floodplain management program.
- There is an emphasis on the retention of a vegetation buffer along streams and drainageways to reduce runoffs and flood damage, and provide for erosion control.
- Most of the following policies have been transformed into City regulations.

POLICIES

7.2.1 THE CITY SHALL REQUIRE AS A PRE-CONDITION TO DEVELOPMENT THAT:

- a. A SITE DEVELOPMENT STUDY BE SUBMITTED FOR DEVELOPMENT IN AREAS SUBJECT TO POOR DRAINAGE, GROUND INSTABILITY OR FLOODING WHICH SHOWS THAT THE DEVELOPMENT IS SAFE AND WILL NOT CREATE ADVERSE OFF-SITE IMPACTS;
- b. NATURAL DRAINAGE WAYS BE MAINTAINED UNLESS SUBMITTED STUDIES SHOW THAT ALTERNATIVE DRAINAGE SOLUTIONS CAN SOLVE ON-SITE DRAINAGE PROBLEMS AND WILL ENSURE NO ADVERSE OFF-SITE IMPACTS;
- c. ALL DRAINAGE CAN BE HANDLED ON-SITE OR THERE IS AN ALTERNATIVE SOLUTION WHICH WILL NOT INCREASE THE OFF-SITE IMPACT;
- d. THE 100-YEAR FLOODPLAIN ELEVATION AS ESTABLISHED BY THE 1981 FLOOD INSURANCE STUDY CONDUCTED BY THE U.S. ARMY CORPS OF ENGINEERS BE PROTECTED; AND
- e. EROSION CONTROL TECHNIQUES BE INCLUDED AS A PART OF THE SITE DEVELOPMENT PLAN.

7.2.2 THE CITY SHALL:

- a. INCLUDE IN ITS CAPITAL IMPROVEMENTS PROGRAM, PLANS FOR SOLVING DRAINAGE PROBLEMS IN THE EXISTING DEVELOPED AREAS;
- b. RECOGNIZE AND ASSUME ITS RESPONSIBILITY FOR OPERATING, PLANNING AND REGULATING WASTEWATER SYSTEMS AS DESIGNATED IN THE MSD WASTEWATER TREATMENT MANAGEMENT "208" PLAN; AND
- c. APPLY ALL APPLICABLE FEDERAL AND STATE LAWS AND REGULATIONS WITH RESPECT TO WASTEWATER.

IMPLEMENTATION STRATEGIES

1. The City will include measures in this plan and in its implementation ordinances to reduce soil erosion.

7.3 WATER SERVICE

Findings

- Both Tigard and Metzger Water Districts have made substantial capital improvements in recent years to provide the highest quality water at the most reasonable rates.
- Reliable and adequate water supply, storage, and delivery systems are presently available or planned to provide sufficient quantities of high quality water to meet existing and future needs of the community.
- The Metzger Water District has signed a 25-year water purchase contract for 100% of its water. With the Tigard Water District entering into long term contracts with the City of Portland and the City of Lake Oswego, citizens of Tigard can be assured of a long-term supply of high quality water.

POLICY

- 7.3.1 THE CITY OF TIGARD SHALL COORDINATE WITH THE TIGARD WATER DISTRICT AND THE METZGER WATER DISTRICT TO PROVIDE A HIGH STANDARD OF WATER SERVICE TO MEET FUTURE DEMANDS AT ALL TIMES.

NOTE: For pre-conditions to development, see Policy 7.6.1.

IMPLEMENTATION STRATEGIES

1. The City of Tigard shall take an active role in participating with the Tigard and Metzger Water Districts in making its views known on matters pertaining to water rates, tax rates, annexations, capital improvements, budgets, etc.
2. When negotiating long-term water supply contracts, the City shall coordinate with the water districts in seeking rates and schedules that are equitable to all water users within the City.
3. If it appears in the best interests of the citizens to consolidate the water district and City operations, it shall be accomplished in an orderly manner with full and detailed consultation with the water districts involved.
4. The City of Tigard shall coordinate with the water districts, through a capital improvements program, to assure adequate water service for future urban development.
5. The Tigard Community Development Code shall require of developers the burden of proof for providing adequate water service prior to the approval and issuance of any development permits.

7.4 SEWER SERVICE

Findings

- The availability of sewer lines is now the single most important public service controlling the direction and pace of urban growth.
- In order to more efficiently use existing vacant land within the already developed area, the network of trunk sewer lines should be completed before there are any significant extensions to non-urbanized areas.

- There are residents within Tigard Urban Planning Area that have or have had failing septic systems. The extent of the septic system failures and concomitant health hazard may be greater than is indicated by County records. As the area develops, the problem is bound to become more conspicuous. Local authorities (the City of Tigard, the Unified Sewerage Agency and the Washington County Health Department) may not have the legal discretion to avoid this solution to the issue of failing septic systems. On the other hand, the potential hardship of enforcing these regulations on some property owners cannot be ignored.
- The existing system by which septic tanks are monitored appears to have serious defects that need to be remedied. According to some soil scientists, for instance, the dye method of tracing septic tank contamination is inadequate.
- Washington County's existing and proposed large-lot zoning designations in the Tigard Plan Area (and to the west on Bull Mountain) may permit septic systems that may fail. Developments in these areas should either be required to have public sewer service or have larger lot sizes than now are allowed or envisioned.

POLICIES

7.4.1 THE CITY SHALL:

- a. DEVELOP A COMPREHENSIVE SEWER PLAN THAT IDENTIFIES THE PRESENT AND FUTURE CAPACITY NEEDS FOR A SEWAGE SYSTEM IN THE PLANNING AREA, AND PROBABLE ROUTES OF FUTURE TRUNKLINES;
- b. REQUIRE THAT FUTURE EXTENSIONS OF COLLECTOR SEWER LINES SHALL BE CONSISTENT WITH ALL CITY ORDINANCES AND AGREEMENTS BETWEEN THE CITY OF TIGARD, WASHINGTON COUNTY AND THE UNIFIED SEWERAGE AGENCY (USA); AND
- c. ADOPT A CLEAR AND CONCISE AGREEMENT WITH USA, IMPLEMENTING THE CITY'S POLICIES FOR EXTENDING THE AVAILABILITY OF SEWER SERVICES AND ENCOURAGING THE PHASING OUT OF SEPTIC TANKS.

7.4.2 THE CITY SHALL REQUIRE THAT AREAS DETERMINED BY THE WASHINGTON COUNTY HEALTH DEPARTMENT OR THE STATE DEPARTMENT OF ENVIRONMENTAL QUALITY TO HAVE FAILING SEPTIC SYSTEMS SHALL BE CONNECTED TO THE PUBLIC SEWER SYSTEM.

7.4.3 IN THE DEVELOPMENT OF NEW SEWER SYSTEMS, PRIORITY SHALL:

- a. FIRST, BE GIVEN TO AREAS HAVING HEALTH HAZARD PROBLEMS WHICH WILL BE DETERMINED BY DEQ; AND
- b. SECOND, BE GIVEN TO AREAS WHERE THE COST-BENEFITS ARE THE GREATEST IN TERMS OF NUMBER OF POTENTIAL CONNECTIONS.

7.4.4 THE CITY SHALL REQUIRE THAT ALL NEW DEVELOPMENT BE CONNECTED TO AN APPROVED SANITARY SEWERAGE SYSTEM.

IMPLEMENTATION STRATEGIES

1. The Tigard Community Development Code will require that development permit applications demonstrate that adequate sanitary sewer collection and/or treatment capacity is available at the time the application is being made. The City may have approved or given previous commitments to development which effects the capacity of the existing system. These previous commitments shall be reviewed prior to additional hookups to that system.
2. The City will coordinate with the Unified Sewerage Agency (U.S.A.) in the construction of new trunk and collector lines through both the City's and U.S.A.'s capital improvement programs.

3. The City will work with the Metropolitan Service District (MSD) and other affected agencies to formalize collections and treatment service area boundaries and to plan major waste water treatment facilities. The City recognizes and assumes its responsibility for operation, planning and regulating waste water systems as designated in MSD's Waste Water Treatment Management Component.
4. Where the system capacity is limited, the City will reserve its remaining sanitary sewer system capacity to those areas within the City.
5. Where the system is not limited, the City, through its own lines and in cooperation with U.S.A., may provide collection and/or treatment services to unincorporated Washington County if line or system capacity exists in accordance with the City's annexation policies.
6. The City will coordinate closely with Washington County to prevent the installation of septic tank systems in areas where sanitary sewer services should be and are being planned as part of either the City's proposed Comprehensive Sewer Plan or U.S.A.'s Capital Improvement Programs.
7. The City will monitor the inflow of storm water into the sanitary sewer system to ensure that unacceptable levels of infiltration are reduced. If necessary, a program will be initiated, to reduce the levels of infiltration.
8. The purpose of Policy 7.4.4 and related policies is to permit pre-existing development utilizing septic tanks or other landfill sewage disposal methods to continue to use such methods until a change of use occurs, a new main structure is erected, or until such methods are declared unlawful or hazardous by the agency having jurisdiction. For all development activity not utilizing sanitary sewer, the City may require a waiver of remonstrance to the future local improvement district for sewer facilities.

7.5 POLICE PROTECTION

Findings

- As in other cities around the country, Tigard crime rates are increasing.
- As the City of Tigard continues to grow there will be a continued need to increase police protection service.

POLICIES

- 7.5.1 THE CITY SHALL COORDINATE EXPANSION OF POLICE PROTECTION, SERVICE AND FACILITIES WITH THE OVERALL GROWTH OF THE COMMUNITY.
- 7.5.2 AS A PART OF THE ONGOING DEVELOPMENT REVIEW, THE CITY SHALL:
 - a. REQUIRE VISIBLE IDENTIFICATION SIGNS TO ASSIST EMERGENCY VEHICLES IN LOCATING THE AREA OF THE PROBLEM;
 - b. UTILIZE DEFENSIBLE SPACE CONCEPTS; AND
 - c. REQUIRE THE TIGARD POLICE DEPARTMENT TO REVIEW DEVELOPMENT APPLICATIONS.

IMPLEMENTATION STRATEGIES

1. As part of the Tigard Community Development Code, crime prevention provisions will be included in:
 - a. The Land Division section of the Tigard Community Development Code; and
 - b. The Site Design Review, Planned Development and Conditional Development sections of the Tigard Community Development Code to include:
 - 1) Requirements for visible identification signs to assist emergency vehicles in locating the area of the problem;

- 2) Defensible space concepts; and
 - 3) Provisions requiring the Tigard Police Department to review development permit applications.
2. Prior to approving or supporting an annexation proposal, the City will make certain that the proposed area can be adequately served with police protection.
- If the area cannot be served, the City will coordinate with the applicable police department to specify any corrective measures that would have to be taken by the City, police department or persons proposing the annexation before the annexation takes place.
3. The nature and level of police services will be subject to coordinated monitoring by the City police department for evaluation and long-range planning.
4. The City will strive to reduce citizen fear of, and susceptibility to crime through increasing awareness of crime prevention methods in development, and involving the entire community in crime prevention programs.

7.6 FIRE PROTECTION

Findings

- Currently, the City of Tigard is serviced by the Tualatin Rural Fire District and Washington County Fire District #1.
 - Continued growth and urbanization places additional need for fire related services.
 - Congestion on some area streets slows the response time to fires. Among locations where this has been noticed are:
 - Vicinity of Greenburg & Tiedeman;
 - Pacific Highway;
 - Main Street;
 - Hall Boulevard between Commercial and Pacific Highway;
 - Walnut Street;
 - Tiedeman;
 - Railroad crossings at Hall Boulevard and Main Street.
- During flooding, some bridges may be closed (e.g., at Grant Street and on Hall Boulevard) necessitating the use of time consuming circuitous routes.
- Subdivision plats can create access problems when there are too few through streets. There are numerous examples of dead end streets throughout the City.

POLICY

- 7.6.1 THE CITY SHALL REQUIRE AS A PRE-CONDITION TO DEVELOPMENT THAT:
- a. THE DEVELOPMENT BE SERVED BY A WATER SYSTEM HAVING ADEQUATE WATER PRESSURE FOR FIRE PROTECTION PURPOSES;
 - b. THE DEVELOPMENT SHALL NOT REDUCE THE WATER PRESSURE IN THE AREA BELOW A LEVEL ADEQUATE FOR FIRE PROTECTION PURPOSES; AND
 - c. THE APPLICABLE FIRE DISTRICT REVIEW ALL APPLICATIONS.

IMPLEMENTATION STRATEGIES

1. The City and private developers will coordinate with the applicable fire districts on all development proposals within the City.

2. Prior to approving or supporting an annexation proposal, the City will make certain that the proposed area can be adequately served with fire protection. If the area cannot be served, the City will coordinate with the applicable fire district to specify any corrective measures that would have to be taken by the City, fire district or persons proposing the annexation before the annexation takes place.
3. The nature and level of fire services will be subject to coordinated monitoring by the City and fire districts for evaluation and long-range planning.

7.7 PRIVATE UTILITIES

Findings

- Utilities such as natural gas, electricity and telephone are provided by private utility agencies.
- There is a need for development of a capital improvement plan to coordinate programs developed by public and private utilities.

POLICY

- 7.7.1 COMMUNITY LAND USE PLANNING SHALL BE COORDINATED WITH PRIVATE UTILITY AGENCIES TO ENSURE THE AVAILABILITY OF SERVICES WHEN NEEDED.

IMPLEMENTATION STRATEGIES

1. The City shall work with all private utilities, public utilities and other public agencies which work in public rights-of-way (e.g., City and County public works departments) to ensure that each utility is provided with plans, programs and schedules outlining any anticipated construction/reconstruction of public streets.
2. The Community Development Code shall provide for the review of such facilities (e.g., substations, receiving and transmitting towers, and other uses listed under Major Impact Utilities and Services) through the conditional development process.

7.8 SCHOOLS

Findings

- The location and development of school facilities has a significant impact on residential development, transportation system location and development of public facilities and services.
- Although the boundaries of the Tigard 23J School District extend beyond the Tigard Urban Planning Area, the location and function of district[s] land uses have a major impact upon the Tigard Urban Planning Area.
- Students in the northwest corner of Tigard attend the Beaverton School District #48. These irregular school district boundaries raise the following problems:
 1. Families living in Tigard with children attending Beaverton schools must pay out-of-district fees for recreational services to either Tigard or Beaverton; and
 2. Many of these same families often subscribe to the Valley Times in order to receive Beaverton School District news. The Valley Times does not, however, cover Tigard news, especially related to public hearings and other related land use matters.
- Schools have a major impact on future land use decisions.
- Both existing and future schools can help define residential areas and serve as activity centers.
- Historically, the school district and the City of Tigard have cooperated in the use of facilities.

- State land use goals and guidelines require cooperation and coordination in land use decisions between the City and the school district.
- Both of the school districts that serve Tigard are separate taxing districts and are not the responsibility of the City of Tigard government.

POLICY

- 7.8.1 THE CITY SHALL WORK CLOSELY WITH THE SCHOOL DISTRICTS TO ENSURE THE MAXIMUM COMMUNITY USE OF [THE] SCHOOL FACILITIES FOR TIGARD RESIDENTS THROUGH LOCATIONAL CRITERIA AND THE PROVISIONS OF URBAN SERVICES.

IMPLEMENTATION STRATEGIES

1. The City shall monitor school capacity by requiring requests for development proposals and permits to be reviewed by the applicable school district for effects on school capacity as a pre-condition to development.
2. The City shall coordinate with the school districts whereby each party is regularly informed of the others activities on short and long range planning; all issues of mutual interest, e.g., school/park facilities; and the financing and managing of those facilities.
3. The City shall develop "Locational Criteria" and will cooperate with the school districts in their efforts to select new school sites in order to ensure adequate facilities and minimize conflicts with the Comprehensive Plan.
4. The City shall support educational and occupational training programs and, when appropriate, make selective resources of the City available to public agencies and private programs.
5. The City shall encourage the use of schools as an integral part of the community by making joint agreements with the school district to allow community uses of school facilities for recreation, open space and meeting rooms.

7.9 HEALTH SERVICES

Findings

- Although there are health care facilities within the Tigard Urban Planning Area, Tigard's primary health service needs are served by those facilities throughout the Portland Metropolitan area.
- There are two major hospitals in close proximity to the City, St. Vincent's which is less than 15 minutes driving time and Meridian Park which is less than 10 minutes driving time.

POLICY

- 7.9.1 THE CITY SHALL:
- a. ENCOURAGE COOPERATION BETWEEN LOCAL, STATE, FEDERAL AND PRIVATE AGENCIES IN PLANNING AND PROVIDING FOR HEALTH AND RELATED SOCIAL SERVICES; AND
 - b. PROVIDE THE OPPORTUNITY FOR THE NECESSARY HEALTH SERVICES TO BE PROVIDED WITHIN THE CITY THROUGH THE PROVISION OF THE COMMUNITY DEVELOPMENT CODE.

IMPLEMENTATION STRATEGIES

1. As part of the Community Development Code:
 - a. Hospitals will be permitted as conditional uses in all residential and commercial development districts;
 - b. Group care facilities will be permitted outright in medium, medium-high and high density residential districts and permitted as conditional uses in low density residential districts; and
 - c. Medical offices and clinics will be allowed at least in commercial districts.

7.10 LOCAL GOVERNMENT FACILITIES

Findings

- The current space owned by the City for administrative offices does not meet the space needs of the City. Therefore, the City currently rents the needed space for administrative purposes.
- The City has rented space in a building which is geographically centered in the community.

POLICY

- 7.10.1 LOCAL GOVERNMENT ADMINISTRATION FACILITIES SHOULD REMAIN CENTRALIZED IN THE CENTRAL BUSINESS DISTRICT.

IMPLEMENTATION STRATEGY

1. The City will continue to locate its facilities, when feasible, in a location central to all residents of the City.

7.11 LIBRARY SERVICES

Findings

- Current library facilities are inadequate.
- Increased demands will require an expansion of library facilities and service.

POLICY

- 7.11.1 THE CITY SHALL, WHERE ECONOMICALLY FEASIBLE, PROVIDE FOR LIBRARY SERVICES WHICH MEET THE USER DEMAND OF ITS RESIDENTS.

IMPLEMENTATION STRATEGY

1. The City shall continue to work with the Library to provide adequate library services.

7.12 SOLID WASTE DISPOSAL AND RECYCLING

Findings

- Per capita generation of solid waste has been increasing. A considerable reduction of the level of solid waste disposed of in landfills can be effected by recycling, particularly through the use of source separation.
- The recycling of solid waste conserves limited natural resources and energy.
- The storage and disposal of hazardous substances are problems of increasing public concern.

- The Metropolitan Service District (MSD) has been designated with the primary responsibility of finding a solution to the disposal of solid waste[s], which is a regional problem. Metro maintains a regional solid waste management plan which is used to guide activities such as the search for new regional landfills and planning of solid waste transfer stations, resource recovery plants, and recycling programs.
- Collection of solid waste in the City is handled by private firms operating under a mutually exclusive franchise granted by the City Council.
- City policies and strategies regarding solid waste management must include recognition of Metro's primary role in planning and coordinating solid waste disposal for the region and provisions which will help achieve the regional objectives of reducing the amount of waste that needs to be disposed of in sanitary landfills.

POLICIES

- 7.12.1 THE CITY SHALL RECOGNIZE THE METROPOLITAN SERVICE DISTRICT'S (MSD) RESPONSIBILITY AND AUTHORITY TO PREPARE AND IMPLEMENT A SOLID WASTE MANAGEMENT PLAN, AND WILL PARTICIPATE IN THESE PROCEDURES AS APPROPRIATE.
- 7.12.2 THE CITY SHALL PROVIDE THE OPPORTUNITY TO ESTABLISH A PERMANENT, FULL-LINE RECYCLING CENTER THROUGH THE PROVISIONS OF THE COMMUNITY DEVELOPMENT CODE. THE LOCATION SHOULD BE NEAR THE CENTER OF THE COMMUNITY AND SHOULD BE OPEN EVERY DAY.

IMPLEMENTATION STRATEGIES

1. The City will promote the recycling of solid waste. Such measures may include giving financial incentive to solid waste collectors who recycle, and the establishment of an internal paper recycling program in City Hall and City Maintenance facilities.
2. The City will work with MSD and the State DEQ in adequately identifying future needs for solid waste disposal in Tigard and Washington County.

8. TRANSPORTATION

This chapter addresses Statewide Planning Goal #12:

Transportation which requires local jurisdictions "to provide and encourage a safe, convenient and economic transportation system."

Transportation planning has been defined as "...the process by which transportation improvements or new facilities are systematically conceived, tested as to present and future adequacy, and programmed for future construction. Modern transportation planning emphasizes the total transportation system. It considers all modes of transport which are economically feasible to a state, region or urban area." (Goodman & Freund, Principals and Practices of Urban Planning, "Transportation Planning")

The transportation plan for Tigard reaches beyond the Tigard Planning Area and includes traffic and transportation impacts within other areas of the southwest subregion of the Portland Metropolitan Area. METRO acts as the regional coordinator for transportation planning throughout the Portland Metropolitan Area. The other major service district impacting Tigard is Tri-Met which is charged with the responsibility for providing public transportation throughout the metropolitan area.

The Comprehensive Plan proposes a land use plan that encourages and facilitates balanced transportation development for the City. The plan recognizes that land use and transportation investments are interconnected and that relationship should be reinforced to produce an acceptable urban environment.

Detailed historical information concerning transportation in the Tigard Urban Planning Area is available in the "Comprehensive Plan Report: Transportation." Detailed current information is available in the 2001 Tigard Transportation System Plan.

The 2001 Tigard Transportation System Plan updates the comprehensive plan and policies. However, it does not fully replace all elements of the comprehensive plan adopted prior to the 2001 TSP. For this reason, a new Section has been added to the beginning of the Transportation Policies Section to encompass the system wide changes developed as part of the TSP process. Some of this information is repeated and expanded upon in other policy sections. Where a policy or implementation strategy specifically conflicts with the updated TSP, the specific policy or implementation strategy has been deleted.

8.1 TRANSPORTATION SYSTEM

Findings

- ♦ Much of the traffic within Tigard is through traffic with origins and destinations outside of Tigard. There are no reasonable alternate routes for the 99W corridor traffic.
- ♦ There are 22 intersections near or at capacity based on the 2001 Tigard Transportation System Plan.
- ♦ There is no continuous bicycle network in Tigard.
- ♦ There are significant gaps in the sidewalk system with few interconnected locations linking to schools, retail, parks and transit.
- ♦ Segments of Highway 217 and I-5 are over capacity and ORE 99W will continue to serve more through traffic in the future.
- ♦ Future traffic models indicate ORE 99W and half of the signalized traffic intersections fail within 20 years assuming no improvements are made.
- ♦ Travel time data on Highway 217 indicates that some of the slowest travel speed on the facility occurs in Tigard due to existing capacity issues and the need for interchange improvements.
- ♦ In the development of the transportation system plan, seven goals were identified which were used as the guidelines for the development of the policies and implementation strategies. The goals were: livability, balanced transportation system, safety, performance, accessibility, goods movement, and coordination.

POLICIES

- 8.1.1 PLAN, DESIGN AND CONSTRUCT TRANSPORTATION FACILITIES IN A MANNER WHICH ENHANCES THE LIVABILITY OF TIGARD BY:
- a. PROPER LOCATION AND DESIGN OF TRANSPORTATION FACILITIES.
 - b. ENCOURAGING PEDESTRIAN ACCESSIBILITY BY PROVIDING SAFE, SECURE AND DESIRABLE PEDESTRIAN ROUTES.
 - c. ADDRESSING ISSUES OF EXCESSIVE SPEEDING AND THROUGH TRAFFIC ON LOCAL RESIDENTIAL STREETS THROUGH A NEIGHBORHOOD TRAFFIC PROGRAM. THE PROGRAM SHOULD ADDRESS CORRECTIVE MEASURES FOR EXISTING PROBLEMS AND ASSURE THAT DEVELOPMENT INCORPORATES TRAFFIC CALMING.
- 8.1.2 PROVIDE A BALANCED TRANSPORTATION SYSTEM, INCORPORATING ALL MODES OF TRANSPORTATION (INCLUDING MOTOR VEHICLE, BICYCLE, PEDESTRIAN, TRANSIT AND OTHER MODES) BY:
- a. THE DEVELOPMENT OF AND IMPLEMENTATION OF PUBLIC STREET STANDARDS THAT RECOGNIZE THE MULTI-PURPOSE NATURE OF THE STREET RIGHT-OF-WAY FOR UTILITY, PEDESTRIAN, BICYCLE, TRANSIT, TRUCK AND AUTO USE.
 - b. COORDINATION WITH TRI-MET, AND/OR ANY OTHER TRANSIT PROVIDERS SERVING TIGARD, TO IMPROVE TRANSIT SERVICE TO TIGARD. FIXED ROUTE TRANSIT WILL PRIMARILY USE ARTERIAL AND COLLECTOR STREETS IN TIGARD. DEVELOPMENT ADJACENT TO TRANSIT ROUTES WILL PROVIDE DIRECT PEDESTRIAN ACCESSIBILITY.
 - c. CONSTRUCTION OF BICYCLE LANES ON ALL ARTERIALS AND COLLECTORS WITHIN TIGARD CONSISTENT WITH THE BICYCLE MASTER. ALL SCHOOLS, PARKS, PUBLIC FACILITIES AND RETAIL AREAS SHALL STRIVE TO HAVE DIRECT ACCESS TO A BIKEWAY.
 - d. CONSTRUCTION OF SIDEWALKS ON ALL STREETS WITHIN TIGARD. ALL SCHOOLS, PARKS, PUBLIC FACILITIES AND RETAIL AREAS SHALL STRIVE TO HAVE DIRECT ACCESS TO A SIDEWALK.
 - e. DEVELOPMENT OF BICYCLE AND PEDESTRIAN PLANS WHICH LINK TO RECREATIONAL TRAILS.
 - f. DESIGN LOCAL STREETS TO ENCOURAGE A REDUCTION IN TRIP LENGTH BY PROVIDING CONNECTIVITY AND LIMITING OUT-OF-DIRECTION TRAVEL AND PROVIDE CONNECTIVITY TO ACTIVITY CENTERS AND DESTINATIONS WITH A PRIORITY FOR BICYCLE AND PEDESTRIAN CONNECTIONS.
 - g. TIGARD WILL PARTICIPATE IN VEHICLE TRIP REDUCTION STRATEGIES DEVELOPED REGIONALLY TARGETED TO ACHIEVE NON-SINGLE OCCUPANT VEHICLE LEVELS OUTLINED IN TABLE 1.3 OF THE REGIONAL TRANSPORTATION PLAN.
 - h. TIGARD WILL SUPPORT THE DEVELOPMENT OF A COMMUTER RAIL SYSTEM AS PART OF THE REGIONAL TRANSIT NETWORK.
- 8.1.3 STRIVE TO ACHIEVE A SAFE TRANSPORTATION SYSTEM BY THE DEVELOPMENT OF STREET STANDARDS, ACCESS MANAGEMENT POLICIES AND SPEED CONTROLS WHEN CONSTRUCTING STREETS, AND BY MAKING STREET MAINTENANCE A PRIORITY AND THROUGH A COMPREHENSIVE PROGRAM OF ENGINEERING, EDUCATION AND ENFORCEMENT.
- a. DESIGN OF STREETS SHOULD RELATE TO THEIR INTENDED USE.
 - b. DESIGN SAFE AND SECURE PEDESTRIAN AND BIKEWAYS BETWEEN PARKS AND OTHER ACTIVITY CENTERS IN TIGARD.

- c. DESIGNATE SAFE AND SECURE ROUTES TO SCHOOLS FOR EACH SCHOOL. ANY NEW RESIDENTIAL PROJECT SHOULD IDENTIFY THE SAFE PATH TO SCHOOL FOR CHILDREN
- d. REFINE AND MAINTAIN ACCCESS MANAGEMENT STANDARDS FOR ARTERIAL AND COLLECTOR STREETS TO IMPROVE SAFETY IN TIGARD.
- e. ESTABLISH A CITY MONITORING SYSTEM THAT REGULARLY EVALUATES, PRIORITIZES AND MITIGATES HIGH ACCIDENT LOCATIONS WITHIN THE CITY.
- f. NEW ROADWAYS SHALL MEET APPROPRIATE LIGHTING STANDARDS. EXISTING ROADWAYS SHALL BE SYSTEMATICALLY RETROFITTED WITH ROADWAY LIGHTING.
- g. REQUIRE NEW DEVELOPMENT TO PROVIDE SAFE ACCESS TO AND TO GAIN SAFE ACCESS FROM A PUBLICALLY DEDICATED AND IMPROVED STREET (I.E. DEDICATE RIGHT-OF-WAY, IF NOT ALREADY ON A PUBLIC STREET, AND INSTALL IMPROVEMENTS IN ROUGH PROPORTIONALITY TO THE DEVELOPMENT'S IMPACT) AND PROVIDE SAFE ACCESS.

8.1.4 SET AND MAINTAIN TRANSPORTATION PERFORMANCE MEASURES THAT:

- a. SET A MINIMUM INTERSECTION LEVEL OF SERVICE STANDARD FOR THE CITY OF TIGARD AND REQUIRES ALL PUBLIC FACILITIES TO BE DESIGNED TO MEET THIS STANDARD.
- b. SET PARKING RATIOS TO PROVIDE ADEQUATE PARKING, WHILE PROVIDING AN INCENTIVE TO LIMIT THE USE OF THE SINGLE OCCUPANT VEHICLE.
- c. ENCOURAGE WORKING WITH OTHER TRANSPORTATION PROVIDERS IN WASHINGTON COUNTY, INCLUDING TRI-MET, METRO AND ODOT TO DEVELOP, OPERATE AND MAINTAIN INTELLIGENT TRANSPORTATION SYSTEMS, INCLUDING COORDINATION OF TRAFFIC

8.1.5 DEVELOP TRANSPORTATION FACILITIES WHICH ARE ACCESSIBLE TO ALL MEMBERS OF THE COMMUNITY AND MINIMIZE OUT OF DIRECTION TRAVEL BY:

- a. THE DESIGN AND CONSTRUCTION OF TRANSPORTATION FACILITIES TO MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.
- b. THE DEVELOPMENT OF NEIGHBORHOOD AND LOCAL CONNECTIONS TO PROVIDE ADEQUATE CIRCULATION IN AND OUT OF THE NEIGHBORHOODS.
- c. WORK WITH WASHINGTON COUNTY AND ODOT TO DEVELOP AN EFFICIENT ARTERIAL GRID SYSTEM THAT PROVIDES ACCESS WITHIN THE CITY, AND SERVES THROUGH CITY TRAFFIC.

8.1.6 PROVIDE FOR EFFICIENT MOVEMENT OF GOODS AND SERVICES THROUGH THE DESIGN OF ARTERIAL ROUTES, HIGHWAY ACCESS AND ADJACENT LAND USES IN WAYS THAT FACILITATE THE EFFICIENT MOVEMENT OF GOODS AND SERVICES AND THE SAFE ROUTING OF HAZARDOUS MATERIALS CONSISTENT WITH FEDERAL AND STATE GUIDELINES.

8.1.7 IMPLEMENT THE TRANSPORTATION SYSTEM PLAN (TSP) IN A COORDINATED MANNER BY COORDINATING AND COOPERATING WITH ADJACENT AGENCIES (INCLUDING WASHINGTON COUNTY, BEAVERTON, TUALATIN, LAKE OSWEGO, CITY OF PORTLAND, TRI-MET, METRO AND ODOT) WHEN NECESSARY TO DEVELOP TRANSPORTATION PROJECTS WHICH BENEFIT THE REGION AS A WHOLE IN ADDITION TO THE CITY OF TIGARD.

IMPLEMENTATION STRATEGIES

1. Design streets and highways to respect the characteristics of the surrounding land uses, natural features, and other community amenities.
2. Develop and maintain a pedestrian plan in Tigard, outlining pedestrian routes. Develop sidewalk standards to define various widths, as necessary, for City street types.
3. Develop and maintain a program of street design standards and criteria for neighborhood traffic management (NTM) for use in new development and existing neighborhoods. Measures to be developed may include (but are not limited to) narrower streets, speed humps, traffic circles, curb/sidewalk extensions, curving streets, diverters and/or other measures, as developed as part of a City NTM plan.
4. Develop and maintain a series of system maps and design standards for motor vehicles, bicycle, pedestrian, transit and truck facilities in Tigard.
5. The Regional Transportation Plan (RTP) and Tri-Met service plans will be the guiding documents for development of Tigard's transit plan. The City should provide input to Tri-Met regarding their specific needs as they annually review their system. This input should focus on improving service (coverage and frequency) to under-served areas. New transit service should be considered concurrent to street improvements when significant street extensions are completed. The City should encourage land intensive uses to locate near transitways and require high intensity uses (i.e. large employment, commercial sites) to provide transit facilities. When bus stops reach 75 boardings per day, bus shelters should be considered in development review. Sidewalks should be available within ¼ mile from all transit routes and transit should be provided to schools and parks.
6. Develop a bicycle plan which connects key activity centers (such as schools, parks, public facilities and retail areas) with adjacent access. Standards for bicycle facilities within Tigard will be developed and maintained. Where activity centers are on local streets, connections to bicycle lanes shall be designated.
7. Develop a pedestrian plan which connects key activity centers with adjacent access. Require sidewalks to be constructed on all streets within Tigard.
8. Standards for pedestrian facilities within Tigard will be developed and maintained.
9. The bicycle and pedestrian plans will need to indicate linkages between recreational and basic pedestrian networks. A primary facility in Tigard should link together Fanno Creek, Tualatin River and the BPA right-of-way in the west of Tigard. Design standards for recreational elements will need to be developed and maintained.
10. Revise the Code to require new streets built to provide connectivity to incorporate traffic management design elements, particularly those which inhibit speeding. As a planning standard, require local streets to have connections every 530 feet in planning local and neighborhood streets. The purpose of this policy is to provide accessibility within Tigard, with a focus on pedestrian connectivity. Pedestrian connectivity can be provided via pedestrian/bike paths between cul-de-sacs and/or greenways where auto connectivity does not exist or is not feasible.
11. Support development of a commuter rail system connecting the south Metro area to the Beaverton/Hillsboro area, with stop(s) in Tigard.
12. A functional classification system shall be developed for Tigard which meets the City's needs and respects needs of other agencies (Washington County, Metro, ODOT). Appropriate design standards for these roadways will be developed by the appropriate jurisdiction.
13. Place a high priority on routine street maintenance to preserve its infrastructure investment and improve safety.
14. Undertake a process of defining school routes for pedestrians by working with the School District, citizens and developers.

15. Develop guidelines to provide access control standards and apply these standards to all new road construction and new development. For roadway reconstruction, existing driveways shall be compared with the standards and a reasonable attempt shall be made to comply (consolidating driveway accesses or relocating driveways to a lower classification street are examples).
16. Develop a process to review traffic accident information regularly to systematically identify, prioritize and remedy safety problems. Working with the County, develop a list of high collision sites and projects necessary to eliminate such problems. Require development applications to identify and mitigate for high collision locations if they generate 10% increase to existing traffic on an approach to a high collision intersection. Washington County's SPIS (Safety Priority Indexing System) could be used as a basis for determining high collision locations.
17. Include paths to schools, parks, and town center areas as priority roadway lighting locations.
18. Require development to provide right-of-way (if needed) and safe access as determined by application of the City's development code and standards for design. Require that the minimum City standards be met for half-street adjacent to developing property for a development to proceed (with consideration of rough proportionality). Apply this policy to both pedestrians and motor vehicles.
19. Monitor Metro and Washington County's current work to develop a level of service standard. Level of service E (and demand-to-capacity ratio of 1.0 or less), Highway Capacity Manual, Chapters 15, 16, and 17 (or subsequent updated references) is recommended to balance provision of roadway capacity with level of service and funding. ODOT, Metro and Washington County performance standards should be considered on state or County facilities and for 2040 Concept Areas (as defined in Table 1.2 of the RTP). The City will work to make the arterial & collector street systems operate effectively to discourage "cut-through" traffic on neighborhood and local streets.
20. Work toward the eventual connection of streets identified on the Transportation plan map as development occurs, as funds are available and opportunities arise.
21. As outlined in Title 6 of the Metro Urban Growth Management Functional Plan, develop access connection standards. The arterial street system should facilitate street and pedestrian connectivity.
22. Work with federal agencies, the Public Utility Commission, the Oregon Department of Energy and ODOT to assure consistent laws and regulations for the transport of hazardous materials.
23. Maintain plan and policy conformance to the Regional Transportation Plan and Transportation Planning Rule (OAR 660-012). Seek compatibility with all adjacent county and city jurisdiction plans.

8.2 TRAFFICWAYS

Findings

- A need exists to place all of the existing public local and collector streets in the Tigard City Limits under the City's jurisdiction.
- According to a Washington County computer study 48-60% of Tigard residents work outside of the Washington County area.
- Between 77-83% of Tigard residents commute to work by auto as single occupants.
- Major congestion problems within the City have resulted from the rapid population growth since 1970, creating a need for major street improvements.
- A corridor study for Pacific Highway (99W) has not been prepared by Metro. It is the only major trafficway within the region which has not been studied. Pacific Highway, the major trafficway through the City, has the highest traffic volumes, congestion and accident[s] rates within the City. There is a need to prepare a corridor study for Pacific Highway. The City, Metropolitan Service District and [the] State should coordinate such a study.
- Many of the streets in Tigard are dead-ended which adds to the congestion on existing completed streets. Therefore, a number of street connections need to be constructed.

- A major concern of the community regarding transportation is the need to maintain and improve the livability of residential areas in the face of increasing population and transportation requirements.
- The City needs to develop a strategy to coordinate public street improvements with private sector improvements to achieve the most effective use of the limited dollars available for road development and improvement.
- Major residential growth during the planning period is expected to occur in the westerly and southerly areas of Tigard. Both of these areas lack adequate improved trafficways.
- A need exists during the planning period to complete a collector street system between Scholls Ferry Road, Walnut Street, Gaarde Street, Bull Mountain Road and Pacific Highway. The location of these connections needs to be coordinated between the City, County, State and [the] Metropolitan Service District.
- A need exists to complete the collector street system within the Tigard Triangle area to make more of this area accessible to developers, employers and employees.

POLICIES

- 8.2.1 THE CITY SHALL PLAN FOR A SAFE AND EFFICIENT STREET AND ROADWAY SYSTEM THAT MEETS CURRENT NEEDS AND ANTICIPATED FUTURE GROWTH AND DEVELOPMENT.
- 8.2.2 THE CITY SHALL PROVIDE FOR EFFICIENT MANAGEMENT OF THE TRANSPORTATION PLANNING PROCESS WITHIN THE CITY AND THE METROPOLITAN AREA THROUGH COOPERATION WITH OTHER FEDERAL, STATE, REGIONAL AND LOCAL JURISDICTIONS.
- 8.2.3 THE CITY SHALL REQUIRE AS A PRECONDITION TO DEVELOPMENT APPROVAL THAT:
- DEVELOPMENT ABOUT A PUBLICLY DEDICATED STREET OR HAVE ADEQUATE ACCESS APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY;
 - STREET RIGHT-OF-WAY BE DEDICATED WHERE THE STREET IS SUBSTANDARD IN WIDTH;
 - THE DEVELOPER COMMIT TO THE CONSTRUCTION OF THE STREETS, CURBS AND SIDEWALKS TO CITY STANDARDS WITHIN THE DEVELOPMENT;
 - INDIVIDUAL DEVELOPERS PARTICIPATE IN THE IMPROVEMENT OF EXISTING STREETS, CURBS AND SIDEWALKS TO THE EXTENT OF THE DEVELOPMENT'S IMPACTS;
 - STREET IMPROVEMENTS BE MADE AND STREET SIGNS OR SIGNALS BE PROVIDED WHEN THE DEVELOPMENT IS FOUND TO CREATE OR INTENSIFY A TRAFFIC HAZARD;
 - TRANSIT STOPS, BUS TURNOUT LANES AND SHELTERS BE PROVIDED WHEN THE PROPOSED USE OF A TYPE WHICH GENERATES TRANSIT RIDERSHIP;
 - PARKING SPACES BE SET ASIDE AND MARKED FOR CARS OPERATED BY DISABLED PERSONS AND THAT THE SPACES BE LOCATED AS CLOSE AS POSSIBLE TO THE ENTRANCE DESIGNED FOR DISABLED PERSONS; AND
 - LAND BE DEDICATED TO IMPLEMENT THE BICYCLE/PEDESTRIAN CORRIDOR IN ACCORDANCE WITH THE ADOPTED PLAN.
- 8.2.4 A CHANGE IN ROADWAY CLASSIFICATION, OR LOCATION SHALL REQUIRE AN AMENDMENT TO THE COMPREHENSIVE PLAN TRANSPORTATION MAP, , THE MAP WILL BE AMENDED BY DESIGNATING THE LOCATION OF THE ROADWAY AND DESIGNATING ITS CLASSIFICATION.

- 8.2.5 THE CITY SHALL SUPPORT THE GOALS AND OBJECTIVES OF THE OREGON DEPARTMENT OF TRANSPORTATION TO IMPROVE TRAFFIC FLOW AND CAPACITY AT THE INTERCHANGE OF I-5 AND HIGHWAY 217/KRUSE WAY. HOWEVER, THE CITY RETAINS THE PREROGATIVE TO REVIEW, COMMENT AND CONCUR WITH THE ACTUAL ALIGNMENTS OF THE PROJECT.
- 8.2.6 THE CITY SHALL ADOPT THE FOLLOWING TRANSPORTATION IMPROVEMENT STRATEGY IN ORDER TO ACCOMMODATE PLANNED LAND USES IN THE TIGARD TRIANGLE:
- a. Highway 99W should be widened to 6 lanes throughout the study area (tool box). This improvement should be constructed in the short term. In the event that widening Highway 99 to six lanes is prohibitive due to physical constraints, the Dartmouth extension could potentially provide needed northeast-to-southwest travel demand.
 - b. 72nd Avenue should be widened to four lanes with left turn lanes at major intersections and the Hunziker/Hampton overcrossing should be constructed. These two improvements will provide additional roadway capacity for circulation within the Triangle and for access to and from the triangle via 72nd Avenue. Construction of the Hunziker/Hampton overcrossing would have the additional advantages of eliminating geometric deficiencies at the Highway 217/72nd Avenue interchange; thereby providing further additional capacity at this interchange. For the buildout scenario (2015), these improvements will provide adequate capacity in the vicinity of the Highway 217/72nd Avenue interchange.
 - c. The Hampton/Hunziker connection is only justified based on its operational relief to the 72nd interchange. Further study should be conducted to examine alternative measures to relieve this situation in a more cost effective way. Further study may indicate that extending Hampton further southwesterly (to connect with Hall Boulevard in the vicinity of McDonald Street) may better accommodate projected travel demand. Short of constructing this structure, a direct ramp instead of a loop ramp from southbound 72nd Avenue to northbound Highway 217 would provide additional capacity in the vicinity of the Highway 217/72nd Avenue interchange.
 - d. Access from Dartmouth to northbound Highway 217 is critical to Tigard Triangle traffic circulation, therefore, it should be studied as part of the Highway 217 corridor analysis to be performed by ODOT and Metro. Under existing conditions, there is significant roadway congestion near the Highway 99W/Highway 217 interchange. Construction of the Dartmouth Extension and access to northbound Highway 217 would mitigate congestion at this interchange because motorists in this area of the Tigard Triangle would have the option to access northbound Highway 217 from Dartmouth or Highway 99W.
 - e. Analysis indicates that there is a long term (20-30 years) need for Dartmouth Road to continue over Highway 217 and potentially south to Hall Boulevard as well as for extending the collector-distributor roads from the Highway 217/72nd Avenue interchange through the Highway 217/Highway 99W interchange. The Highway 217 corridor analysis to be performed by Metro and ODOT should consider the advantages and disadvantages of these improvements. The Dartmouth extension to Hall Boulevard should be constructed only if further system improvements to Hall Boulevard are made concurrently. If additional capacity is not added to Hall Boulevard south of where the Dartmouth extension would be connected, the effectiveness of this connection would be diminished. Alternatively, another roadway could be constructed that provides a connection from the Dartmouth extension to Hall Boulevard in the vicinity of McDonald Street.
 - f. Adopt the functional classification plan for streets internal to the Tigard Triangle as shown on Figure 1. The following policies apply to local streets within the Tigard Triangle:
 1. Local street spacing shall be a maximum of 660 feet.
 2. Access way spacing shall be a maximum of 330 feet.
 3. Spacing of signalized intersections on Major Arterials shall be a minimum of 600 feet.
 4. Existing rights of way will, to the greatest extent possible, be utilized for a local street system. Right of way vacations will be considered only when all other policies in this subsection are met.

- g. The transportation projects described in this section should be added to the City of Tigard's Transportation System Plan. The City, ODOT and Metro should work to include these improvements in regional and state implementation programs.
(Rev. Ord. 91-13; Ord. 96-42)

8.2.7

THE CITY SHALL ADOPT THE FOLLOWING PEDESTRIAN, BICYCLE AND PUBLIC TRANSIT IMPROVEMENT STRATEGY IN ORDER TO ACCOMMODATE EXISTING AND PLANNED LAND USES IN THE WASHINGTON SQUARE REGIONAL CENTER:

- a. Commuter Rail Service and Station: Washington County has proposed commuter rail services from Wilsonville to Beaverton on the existing freight line to the west of Highway 217. The City supports a commuter rail station in the vicinity of the North: Mall to Nimbus Overcrossing.
- b. Pedestrian Improvements – SW Greenburg Road: Construct pedestrian improvements on SW Greenburg Road between SW Hall Boulevard and Highway 217 to improve pedestrian crossing opportunities and safety.
- c. Pedestrian Improvements- SW Hall Boulevard: Construct pedestrian crossing refuge (median) on SW Hall Boulevard between SW Pfaffle Street and SW Locust Street to improve pedestrian crossing opportunities and safety.
- d. Pedestrian And Bicycle Improvements- SW Locust Street: Realign SW 90th Avenue across SW Locust Street to provide a four-legged intersection at Locust Street. Construct curb extensions, sidewalks and bicycle lanes to provide improved non-auto accessibility across and along Locust Street.
- e. Pedestrian Access Improvements- Washington Square Mall: Construct pedestrian improvements (e.g. sidewalks, landscaping, and connections from parking to the mall and surrounding arterials) in the Washington Square Mall area.
- f. Identify potential bicycle network alignments with connections to existing bikeways, neighborhoods and activity centers, with particular emphasis on extending the Fanno Creek Bikeway along Ash Creek.
- g. Construct a pedestrian trail within and/or around the Red Tail Public Golf Course. This presents an opportunity to provide a safe neighborhood walking/exercise area and to serve more of the population using existing resources.
- h. Provide pedestrian/bicycle connections on local streets to, from and within new developments and redevelopments.
- i. Identify potential bicycle network alignments with connections to existing bikeways, neighborhoods and activity centers, with particular emphasis on extending the Fanno Creek Bikeway along Ash Creek.
- j. Shuttle/People Mover: Develop local area transit service operating between the Washington Square Mall area, the Nimbus/Cascade districts and Lincoln Center. The service could use the proposed connections across Highway 217. Initially a shuttle bus, in the future this service could be converted to some type of fixed route system.
- k. Transit Center Improvements: Construct capacity and facility improvements (e.g. real time transfer information, lighting, covered connections to the Mall, and additional bus bays) to the existing transit center at the Washington Square Mall.
- l. Transit System Improvements: The City supports transit routing and frequency improvements in the Regional Center. Tri-Met has provided an outline of potential service improvements and planning that would need to occur to implement these improvements. The range of improvements include relocating the Transit Center to provide better connections into the Mall, coordinating park and ride facilities with the future commuter rail service, providing bus stop improvements in the Regional Center area, and decreasing transit service headways. Tigard, Tri-Met and employers or developers in the district should begin to develop a transit improvement plan for the district.
- m. Travel Demand Management Program: The City recognizes the importance of developing

a travel demand management program for the Regional Center area. A key features of this program will be a Transportation Management Association (TMA) that coordinates the means of decreasing demand for single occupant vehicles within the Regional Center area, parking management strategies, transit system improvements, and travel demand management programs. The City of Tigard, Beaverton, Washington County, Tri-Met, Metro, ODOT and employers in the area should begin to work together to refine this framework into a detailed plan for the area. (Rev. Ord. 02-12)

8.2.8 THE CITY SHALL ADOPT THE FOLLOWING AUTO AND ROADWAY IMPROVEMENT STRATEGY IN ORDER TO ACCOMMODATE EXISTING AND PLANNED LAND USES IN THE WASHINGTON SQUARE REGIONAL CENTER:

- a. Near Term Traffic Operations Improvements: Small-scale roadway operations improvement projects shall be implemented in the near future. These improvements correct existing system deficiencies or provide needed pedestrian, bicycle or transit facilities:
 1. Develop signal timing improvements on Greenburg Road between Highway 217 and the Washington Square Mall.
 2. Construct a separate eastbound right turn lane from Hall Boulevard to Scholls Ferry Road. This could require Hall Boulevard overcrossing improvements.
 3. Construct pedestrian improvements throughout the district.
 4. Develop a shuttle system connecting Lincoln Center, Washington Square Mall and Nimbus Business Park.
 5. Evaluate and confirm that the southbound Hall Boulevard right turn only lane into the Washington Square Mall at Palmblad Lane should be eliminated. Restripe as appropriate.
 6. Develop signal timing improvements on Hall Boulevard that include capabilities to allow buses that have fallen behind schedule to travel to the front of the queue and travel through the signal prior to other traffic ("queue jumping capabilities").
 7. Develop direct access from the Washington Square Mall to the Target Store so that motorists do not have to travel on Hall Boulevard when traveling between the two facilities.
 8. In cooperation with the City of Beaverton and Tri-Met, identify a new Park & Ride site to replace the existing site that was intended to be temporary.
- b. Highway 217 Improvements: Identify and plan for the implementation of improvements to Highway 217 and its interchanges between Interstate 5 and Highway 26.
- c. North: Mall to Nimbus Connection: Construct a bridge over Highway 217 connecting the Washington Square Mall with the Nimbus Business Center. The bridge would include a two-lane roadway, bike lanes, sidewalks and facilities for transit. The bridge is intended to be a facility for local travel within the Regional Center.
- d. SW Nimbus Avenue: There are two components of the SW Nimbus Avenue Improvements:
 1. North of Scholls Ferry Road: Modify the existing roadway (north of Scholls Ferry Road) to a 3-lane facility with parking, bike lanes and sidewalks. Potential for streetscape improvements including solid median with specific turn slots to individual properties.
 2. Nimbus to Greenburg Connection: Extend SW Nimbus Avenue to meet Greenburg Road. This would be a 5-lane roadway with bike lanes and sidewalks, but no on-street parking.

- e. SW Lincoln Street: Modify Lincoln Street to provide a 3-lane section with parking, bike lanes and sidewalks between SW Locust Street and SW Oak Street.
- f. SW Hall Boulevard: The Washington Square Regional Center Task Force identified this project as the fifth priority for implementation in the Regional Center area. The project would first be constructed to 3-lane standards with sidewalks and bike lanes at five lane limits between Oleson Road and Highway 217. If after other project recommendations have been constructed, it is found that Hall Boulevard still needs to be a five-lane facility the roadway would then be widened again. In the interim, and as possible the City of Tigard or ODOT would acquire the right of way necessary for a five-lane section

As a three or five-lane facility, this project includes landscaped median with designated left turn pockets that also provide for improved pedestrian crossing opportunities. This is consistent with Metro the Regional Boulevard Designation for Hall Boulevard.
- g. SW Cascade Avenue: Improve the existing roadway (north and south of Scholls Ferry Road) to 3-lane standard with parking, bike lanes and sidewalks. Potential for streetscape improvements including solid median with specific turn slots to individual properties.
- h. SW Locust Street: Modify Locust Street between Hall Boulevard and Greenburg Road to include a three-lane section with parking, bike lanes, sidewalks and other streetscape improvements to maintain as a lower speed street.
- i. SW Oak Street: Modify the roadway to provide 2-lane section with parking, bike lanes and sidewalk between SW Hall Boulevard and SW Lincoln Street.
- j. Washington Square Internal Roads: Construct improvements to existing Washington Square Mall internal circulation roads to public street standards with bike lanes and sidewalks.
- k. Adopt the functional classification plan for streets internal to the Washington Square Regional Center as shown on Figure 1. The following policies apply to local streets within the regional center:
 - 1. Local street spacing shall be a maximum of 530 feet.
 - 2. Access way spacing shall be a maximum of 330 feet.
 - 3. Spacing of signalized intersections on Major Arterials shall be a minimum of 600 feet.
 - 4. Existing rights of way will, to the greatest extent possible, be utilized for a local street system. Right of way vacations will be considered only when all other policies in this subsection are met.
- l. The transportation projects described in this section should be added to the City of Tigard's Transportation System Plan. The City, ODOT and Metro should work to include these improvements in regional and state implementation programs.

(Rev. Ord. 02-12)

IMPLEMENTATION STRATEGIES

- 1. The City shall develop, adopt and implement a master street plan that anticipates all needed trafficway improvements so as to plan for the necessary available resources to develop these streets when they are needed.
- 2. The City shall develop, maintain and implement a capital improvements program which:
 - a. Is consistent with the land use policies of the Comprehensive Plan;
 - b. Encourages a safe, convenient and economical transportation system;

- c. Furthers the policies and implementation strategies of the City's Comprehensive Plan;
 - d. Considers a variety of transit modes within the rights-of-way;
 - e. Meets local needs for improved transportation services;
 - f. Pursues and establishes other funding sources from the federal, state, regional and/or local agencies; and
 - g. Designates the timing of such projects to ensure their installation when those facilities are needed.
3. The City shall specify street design standards within the Tigard Community Development Code.
 4. The City shall maintain the carrying capacity of arterials and collectors by reducing curb cuts and other means of direct access, and requiring adequate right-of-way and setback lines as part of the development process. The Community Development Code shall state the access requirements for each street classification.
 5. The City's Tigard Community Development Code shall require developers of land to dedicate necessary rights-of-way[s] and install necessary street improvements to the City's standards when such improvements have not been done prior to the developer's proposals. These necessary dedications may be required upon approval of any development proposal.
 6. The City shall control and limit the number of access points and will signalize trafficways in a manner that provides for a consistent flow of traffic and therefore minimizes or reduces vehicular emissions.
 7. The City shall include provisions in the Tigard Community Development Code which addresses the aesthetic quality of the transportation system to ensure community livability and to minimize the effects on abutting properties. This can be accomplished through:
 - a. Building setback requirements;
 - b. Requirements for landscaping and screening and through other site design criteria for visual enhancement;
 - c. Limiting residential land uses along major arterial trafficways; and
 - d. Sign controls.
 8. The City shall coordinate their planning efforts with adjacent cities and other agencies e.g., Beaverton, Portland and Tualatin, Washington County, METRO, Tri-Met and ODOT.
 9. The City shall work out reciprocal agreements with other agencies for exchanging information pertinent to local transportation planning.

8.3 PUBLIC TRANSPORTATION

Findings

- Since the oil embargos of the 1970s, the cost of motor fuels has increased fourfold.
- The Tri-County Metropolitan Transportation District of Oregon (Tri-Met) is responsible for providing public transportation to the residents of Multnomah, Washington and Clackamas Counties.
- Presently, there are Eleven (11) bus lines that service the Tigard area.
- Public transit offers the community an opportunity to reduce traffic and pollution as well as increase energy efficiency.
- Work trips and shopping trips are most conducive to mass transportation.
- The proposed downtown Tri-Met Tigard transfer center will increase service and lessen travel time for riders.

POLICIES

- 8.3.1 THE CITY SHALL COORDINATE WITH TRI-MET TO PROVIDE FOR A PUBLIC TRANSIT SYSTEM WITHIN THE PLANNING AREA WHICH:
- a. MEETS THE NEEDS OF BOTH THE CURRENT AND PROJECTED, FOR THE TIGARD COMMUNITY;
 - b. ADDRESSES THE SPECIAL NEEDS OF A TRANSIT DEPENDENT POPULATION;
 - c. REDUCES POLLUTION AND TRAFFIC; AND
 - d. REDUCES ENERGY CONSUMPTION.
- 8.3.2 THE CITY SHALL ENCOURAGE THE EXPANSION AND USE OF PUBLIC TRANSIT BY:
- a. LOCATING LAND INTENSIVE USES IN CLOSE PROXIMITY TO TRANSITWAYS;
 - b. INCORPORATING PROVISIONS INTO THE COMMUNITY DEVELOPMENT CODE WHICH REQUIRE DEVELOPMENT PROPOSALS TO PROVIDE TRANSIT FACILITIES; AND
 - c. SUPPORTING EFFORTS BY TRI-MET AND OTHER GROUPS TO PROVIDE FOR THE NEEDS OF THE TRANSPORTATION DISADVANTAGED.

IMPLEMENTATION STRATEGIES

1. The City shall request Tri-Met to extend service to areas within the City that do not currently have service.
2. In the City's Community Development Code, the City shall require large developments to provide transit facilities e.g., pull-offs and shelters, if such developments are located adjacent to transit routes.
3. The City shall propose land use densities, within the Comprehensive Plan, along transit oriented corridors that support public transportation service.
4. The City shall work with Tri-Met and other transit providers to encourage transit service for the transit dependent population e.g., the poor and handicapped.
5. The City shall encourage its citizens to use mass transit systems, where possible, to make greater effectiveness of the transit system while reducing automobile usage.
6. The City shall coordinate with the transit providers to encourage carpooling and investigate if there is a local need for carpooling in the Tigard area.

8.4 TRANSPORTATION FOR THE DISADVANTAGED

Findings

- Tri-Met is responsible for providing handicapped transit accessibility including coordination of special transit services by social service agencies.
- Tri-Met conducts the detailed special handicapped transit planning necessary to identify required service improvements and adopt a plan for meeting federal requirements for handicapped accessibility.

POLICY

- 8.4.1 THE CITY SHALL COORDINATE WITH WASHINGTON COUNTY, TRI-MET AND OTHER REGIONAL AND STATE AGENCIES IN THE IDENTIFICATION AND ACCOMMODATION OF INDIVIDUALS WITH SPECIAL TRANSPORTATION NEEDS.

IMPLEMENTATION STRATEGIES

1. The City shall require, through the implementation process, that parking spaces be set aside and marked for disabled persons [parking] and that such spaces be located in convenient locations.
2. The City shall continue to coordinate with [the] appropriate agencies in the identification and accommodation of those individuals with special transportation needs.

8.5 PEDESTRIAN AND BICYCLE PATHWAYS

Findings

- As the City of Tigard continues to grow, more people may rely on the bicycle and pedestrian pathways for utilitarian as well as for recreational purposes.
- In 1974, the City Council adopted a Comprehensive Pedestrian/Bicycle Pathway Plan.
- The City has required adjacent development to install that portion of the bicycle/pedestrian pathways shown on the adopted plan which abuts the development.
- The City has implemented portions of the adopted plan through the City's overlay program.
- The adopted Bicycle/Pedestrian Plan provides for a dual function pathway system; bicycles and pedestrians use the same system.

POLICY

- 8.5.1 THE CITY SHALL LOCATE BICYCLE/PEDESTRIAN CORRIDORS IN A MANNER WHICH PROVIDES FOR PEDESTRIAN AND BICYCLE USERS, SAFE AND CONVENIENT MOVEMENT IN ALL PARTS OF THE CITY, BY DEVELOPING THE PATHWAY SYSTEM SHOWN ON THE ADOPTED PEDESTRIAN/BIKEWAY PLAN.

IMPLEMENTATION STRATEGIES

1. The City shall review each development request adjacent to areas proposed for pedestrian/bike pathways to ensure that the adopted plan is properly implemented, and require the necessary easement or dedications for the pedestrian/bicycle pathways.
2. The City shall review and update the adopted Pedestrian/Bikeway Plan on a regular basis to ensure all developing areas have accessibility to the Pedestrian/Bikeway system.
3. The City shall coordinate with Washington County to connect the City's Pedestrian/Bike Pathway system to the County's system.
4. City codes shall include provisions which prohibit motor driven vehicles on designated and maintained pedestrian/bicycle pathways.

8.6 RAILROADS

Findings

- Tigard is serviced by Southern Pacific and Burlington Northern railroad lines which carry strictly freight through the City Limits.
- Within the downtown area each railroad company has its own trackage and the usage of those lines is based on the railroads' needs.
- There should only be one set of railroad tracks traversing the downtown area. The City is in the process of discussing this issue with both railroads.

- Many of the commercial and industrial businesses within Tigard rely on the railroads for the shipping and receiving of goods.
- The City is currently coordinating the upgrading of all the railroad crossings within Tigard with the railroads.

POLICY

8.6.1 THE CITY SHALL COOPERATE WITH THE RAILROADS IN FACILITATING RAIL FREIGHT SERVICE TO THOSE COMMERCIAL AND INDUSTRIAL BUSINESSES WITHIN THE CITY THAT DEPEND ON RAILROAD SERVICE.

IMPLEMENTATING STRATEGIES

1. The City shall continue to coordinate with the Southern Pacific and Burlington Northern railroads to provide adequate railroad service.
2. The City shall designate adequate commercial and industrial land within close proximity to existing railroad service lines to ease railroad accessibility to those businesses that rely on the service.
3. The City shall coordinate with the railroads to combine the trackage within the downtown area.

(Rev. Ord. 02-03)

9. ENERGY

Statewide Planning Goal #13,

Energy Conservation, requires localities to manage and control land uses and development "so as to maximize the conservation of all forms of energy, based on sound economic principles." The following policies accomplish the objectives of the goal but they are not written at the level of detail necessary to provide the community with a comprehensive energy program. However, the potential need for such a program is becoming increasingly evident as the cost of energy supplies increases and the availability of non-renewable energy sources decreases. The increasing cost of energy combined with the fact that most localities are importers of energy could potentially have a negative impact on local economies. The impact[s] could range from work stoppage[s] or slowdown[s] to reduced disposable income[s] and a disruption of monies within the local economy.

The energy findings, policies and implementation strategies identify conservation as the initial energy source that the community should explore. They do so based on the fact that conservation is the cheapest energy source, most readily available, least environmentally detrimental and most influenced by local policy.

Additional information on this topic is available in the "Comprehensive Plan Report: Energy."

Findings

- Transportation and residential uses account for approximately half of the total energy consumption in the Portland Metropolitan Area. Industrial and commercial uses comprise the other half of energy consumption.
- The City of Tigard has no developed energy sources.
- Conservation of energy at the local level is best achieved through programs aimed at energy efficient transportation modes and land use patterns, reducing travel distances between residential and work areas, infilling vacant land, increasing densities of land uses as a whole and encouraging alternative energy uses.
- All forms of non-renewable energy sources used today are finite and the cost of these sources has increased as the supply has decreased.
- A reduction in the community-wide use of nonrenewable energy sources and the development of renewable energy resources would have a beneficial impact on both local and national economy.
- Mass transit systems can have a positive influence upon energy consumption but require higher density corridors and activity areas to be effective.
- The availability of cheap energy in the past has resulted in the construction of residential and commercial buildings that are energy inefficient. Weatherization and insulation of existing and new structures would substantially reduce energy consumption for heating and cooling these structures.
- Although it is a widely used substitute for traditional energy sources, woodburning stoves can have adverse effects on air quality if improperly used.
- Alternative architecture and site design considerations can affect energy consumption; such as structure orientation to the sun, landscaping, topography and adjacent structures.
- Small scale wind generating devices may be a viable alternative energy source for Tigard residences.
- The private automobile consumes about 75% of all petroleum used in transportation in the Portland Area.

POLICIES

- 9.1.1 THE CITY SHALL ENCOURAGE A REDUCTION IN ENERGY CONSUMPTION BY INCREASED OPPORTUNITIES FOR ENERGY CONSERVATION AND THE PRODUCTION OF ENERGY FROM ALTERNATIVE SOURCES.
- 9.1.2 THE CITY SHALL ESTABLISH A BALANCED AND EFFICIENT TRANSPORTATION SYSTEM WHICH COMPLEMENTS THE LAND USE PLAN AND IS DESIGNED TO MINIMIZE ENERGY IMPACTS.
- 9.1.3 THE CITY SHALL ENCOURAGE LAND USE DEVELOPMENT WHICH EMPHASIZES SOUND ENERGY CONSERVATION, DESIGN AND CONSTRUCTION.

IMPLEMENTATION STRATEGIES

- 1. The City shall encourage public and private programs that offer weatherization and energy conservation programs, e.g., tax credits, low-interest weatherization loans, etc.
- 2. The Tigard Community Development Code shall allow for a variety of housing unit types in most residential development districts which have proven to be energy efficient, e.g., common-wall or clustering of dwelling units.
- 3. The City shall locate higher densities and intensities of land use in proximity to existing and potential transit routes specifically with convenient access to federal and state highways, arterials and major collector streets.
- 4. The City shall, in the Tigard Community Development Code, allow for more flexibility in structure siting to provide for maximum solar exposure.
- 5. The City shall review the feasibility of implementing a solar access ordinance and wind generation provisions.
- 6. The City shall cooperate with both public and private agencies that make use of site development and architectural techniques using natural elements for heating and cooling in all developments.
- 7. The Tigard Community Development Code shall allow for mixed use developments which will support a reduction in traffic trip generation.
- 8. The City shall coordinate with and support public and private planning efforts that advocate alternative forms of transportation such as mass transit, carpooling, ride share, bicycling and walking for commuter purposes.
- 9. Locational criteria shall be established to minimize vehicular travel in order to conserve energy.

10. URBANIZATION

This chapter addresses the concerns expressed by Statewide Planning Goal # 14:

Urbanization, which is "to provide for an orderly and efficient transition from rural to urban land use."

The Urbanization goal is important because it develops a framework within which all development activities have to be coordinated, and it integrates and balances all of the other available land resources in terms of the needs expressed by other goals; namely Housing, Economy, Public Facilities and Services, Natural Features and Open Space, and Transportation.

The urbanization goal also requires an allocation of land for accommodation of urban expansion during the planning period (1980 - 2000), and development of plans to arrange the orderly and efficient transition from urbanizable land to urban land.

The findings, policies and implementation strategies address a variety of topics related to urbanization. Policies describe the process which satisfies the need for efficient, orderly and logical urbanization within the geographical limits of Tigard's Urban Planning Area.

Additional information on this topic is available in the "Comprehensive Plan Report: Urbanization."

Findings

- The City of Tigard grew from 5,302 people in 1970 to 14,286 people in 1980 (Census 1970 & 1980) and the City predicts that Tigard will continue to grow to more than double its current size by the year 2000. The current 1983 population is 18,379. A portion of this increase is due to annexations.
- The City limits have expanded by approximately 4.4 square miles since 1970, to its present size of approximately 8.6 square miles.
- All lands within the Tigard Urban Planning Area as well as the City Limits have been designated for urban land uses, and are wholly within the Portland Metropolitan Area Urban Growth Boundary.
- The Tigard Comprehensive Plan is an active plan, meaning the City plans and designates land uses within the Tigard Urban Planning Area (T.U.P.A.). Washington County retains legal jurisdiction over development proposals, zoning and public improvement projects outside the City limits but within the T.U.P.A. Tigard does have right of review and comment on proposals and projects within the T.U.P.A.
- The area within the Tigard Urban Planning Area, but outside the current City Limits, that is not already developed to urban intensities will be made available for urban uses via an Urban Planning Area Agreement between the City of Tigard and Washington County, annexation to the City and subsequent development proposals by the property owners.
- The City is committed to providing urban level services, or the coordination of providing these services with the appropriate service districts, to all areas within the city limits boundaries.
- The intent of the City is to provide for an orderly and efficient land use pattern and urban services which must be available at the time of development.
- The timing, location and expansion of [the] transportation systems are important factors affecting future urbanization.
- The desired development and growth pattern for the Tigard Urban Planning Area is to be defined by a growth management system, e.g., extension of services, streets and land use which will guide the timing, type and location of growth.
- To assist in the financing of street facilities and improvements, Tigard has imposed a Systems Development Charge (SDC) on new housing development.
- Major trunk line sewer service in the Tigard Urban Planning Area is provided by the Unified Sewerage Agency (USA) of Washington County which has assumed this responsibility for the City's as well as that of eastern Washington County; major sewage system since 1970.

- Water in the Tigard area is provided by the Metzger and Tigard Water Districts. These districts purchase their water from Portland, Lake Oswego and other sources.
- An Urban Planning Area Agreement (UPAA) between Tigard and Washington County regarding land use planning and annexation was adopted in 1983. The intent of this agreement is to:
 - a. Identify the urbanizable land within each jurisdiction surrounding Tigard;
 - b. Provide for orderly and efficient transition from urbanizable land to urban land;
 - c. Provide a process for reviewing the land use designations between the City and County;
 - d. Provide for a process to extend existing services; and
 - e. Provide a process for annexations of land to the City.
- The agreement requires that the parties resolve various issues, otherwise the agreement will lapse on January 1, 1984 (or a later date if the parties extend the agreement) and the 1980 agreement between the parties is revived.
- The City does not have an UPAA with the school districts (Tigard and Beaverton), but the districts do work with the City's Planning and Development Department to estimate the enrollment impact of new residential development in the City.
- The City has made a significant effort in the past to manage the location and type of growth, and to coordinate this growth with the extension of services and expansion of facilities.
- The City is currently in the process of including all of the "unincorporated islands" within the city limits.

10.1 ANNEXATION OF LAND

POLICIES

10.1.1 PRIOR TO THE ANNEXATION OF LAND TO THE CITY OF TIGARD:

- a. THE CITY SHALL REVIEW EACH OF THE FOLLOWING SERVICES AS TO ADEQUATE CAPACITY, OR SUCH SERVICES TO BE MADE AVAILABLE, TO SERVE THE PARCEL IF DEVELOPED TO THE MOST INTENSE USE ALLOWED*, AND WILL NOT SIGNIFICANTLY REDUCE THE LEVEL OF SERVICES AVAILABLE TO DEVELOPED AND UNDEVELOPED LAND WITHIN THE CITY OF TIGARD. THE SERVICES ARE:
 - 1. WATER;
 - 2. SEWER;
 - 3. DRAINAGE;
 - 4. STREETS;
 - 5. POLICE; AND
 - 6. FIRE PROTECTION.

* Most intense use allowed by the conditions of approval, the zone or the Comprehensive Plan.

- b. IF REQUIRED BY AN ADOPTED CAPITAL IMPROVEMENTS PROGRAM ORDINANCE, THE APPLICANT SHALL SIGN AND RECORD WITH WASHINGTON COUNTY A NONREMONSTRANCE AGREEMENT REGARDING THE FOLLOWING:
 - 1. THE FORMATION OF A LOCAL IMPROVEMENT DISTRICT (L.I.D.) FOR ANY OF THE FOLLOWING SERVICES THAT COULD BE PROVIDED THROUGH SUCH A DISTRICT. THE EXTENSION OR IMPROVEMENT OF THE FOLLOWING:
 - a) WATER;

- b) SEWER;
- c) DRAINAGE; AND
- d) STREETS.

2. THE FORMATION OF A SPECIAL DISTRICT FOR ANY OF THE ABOVE SERVICES OR THE INCLUSION OF THE PROPERTY INTO A SPECIAL SERVICE DISTRICT FOR ANY OF THE ABOVE SERVICES.

- c. THE CITY SHALL PROVIDE URBAN SERVICES TO AREAS WITHIN THE TIGARD URBAN PLANNING AREA OR WITH THE URBAN GROWTH BOUNDARY UPON ANNEXATION.

10.1.2 APPROVAL OF PROPOSED ANNEXATIONS OF LAND BY THE CITY SHALL BE BASED ON FINDINGS WITH RESPECT TO THE FOLLOWING:

- a. THE ANNEXATION ELIMINATES AN EXISTING "POCKET" OR "ISLAND" OF UNINCORPORATED TERRITORY; OR
- b. THE ANNEXATION WILL NOT CREATE AN IRREGULAR BOUNDARY THAT MAKES IT DIFFICULT FOR THE POLICE IN AN EMERGENCY SITUATION TO DETERMINE WHETHER THE PARCEL IS WITHIN OR OUTSIDE THE CITY;
- c. THE POLICE DEPARTMENT HAS COMMENTED UPON THE ANNEXATION;
- d. THE LAND IS LOCATED WITHIN THE TIGARD URBAN PLANNING AREA AND IS CONTIGUOUS TO THE CITY BOUNDARY;
- e. THE ANNEXATION CAN BE ACCOMMODATED BY THE SERVICES LISTED IN 10.1.1(a).

10.1.3 UPON ANNEXATION OF LAND INTO THE CITY WHICH CARRIES A WASHINGTON COUNTY ZONING DESIGNATION, THE CITY OF TIGARD SHALL ASSIGN THE CITY OF TIGARD ZONING DISTRICT DESIGNATION WHICH MOST CLOSELY CONFORMS TO THE COUNTY ZONING DESIGNATION.

(Rev. Ord. 84-21)

10.2 EXTENSION OF SERVICES OUTSIDE THE CITY LIMITS

POLICIES

10.2.1 THE CITY SHALL NOT APPROVE THE EXTENSION OF CITY OR UNIFIED SEWERAGE AGENCY (USA) LINES EXCEPT:

- a. WHERE APPLICATIONS FOR ANNEXATION FOR THOSE PROPERTIES HAVE BEEN SUBMITTED TO THE CITY; OR
- b. WHERE A NONREMONSTRANCE AGREEMENT TO ANNEX THOSE PROPERTIES HAS BEEN SIGNED AND RECORDED WITH WASHINGTON COUNTY AND SUBMITTED TO THE CITY; OR
- c. WHERE THE APPLICABLE STATE OR COUNTY HEALTH AGENCY HAS DECLARED THAT THERE IS A POTENTIAL OR IMMINENT HEALTH HAZARD.

10.2.2 IN ADDITION TO THE REQUIREMENTS OF POLICY 10.2.1, THE EXTENSION OF SEWER LINES OUTSIDE OF THE CITY LIMITS SHALL NOT REDUCE THE CAPACITY BELOW THE REQUIRED LEVEL FOR AREAS WITHIN THE CITY.

10.2.3 AS A PRECONDITION TO THE APPROVAL OF THE EXTENSION OF SERVICES OUTSIDE THE CITY LIMITS, THE CITY SHALL HAVE THE RIGHT OF REVIEW FOR ALL DEVELOPMENT PROPOSALS OUTSIDE THE TIGARD CITY LIMITS BUT WITHIN THE TIGARD URBAN PLANNING AREA (REFERENCE TIGARD'S URBAN PLANNING AREA AGREEMENTS WITH WASHINGTON COUNTY). THE CITY SHALL REQUIRE THAT DEVELOPMENT WILL NOT:

- a. PRECLUDE THE FURTHER DEVELOPMENT OF THE PROPERTIES TO URBAN DENSITIES AND STANDARDS; OR
- b. PRECLUDE THE SUBSEQUENT DEVELOPMENT OF SURROUNDING PROPERTIES.

THIS REVIEW SHALL INCLUDE THE FOLLOWING FACTORS AS SET FORTH IN THE TIGARD COMPREHENSIVE PLAN AND APPROPRIATE IMPLEMENTATING ORDINANCES:

- a. LAND USE;
- b. DENSITY;
- c. PLACEMENT OF STRUCTURES ON THE SITE;
- d. STREET ALIGNMENT; AND
- e. DRAINAGE.

IMPLEMENTATION STRATEGIES

- 1. The City shall encourage all of the urbanizable land within Tigard's Urban Planning Area to be within the City Limits.
- 2. The City shall direct its annexation policies to conform with and support the City's Comprehensive Plan.
- 3. The City shall phase annexations to allow for the incorporation of urbanizable land in a manner that is consistent with the Comprehensive Plan, and the Urban Planning Area Agreement, and to provide for orderly transition of urban services.
- 4. The City shall work toward establishing a workable, jointly approved growth management agreement with the Washington County. The agreement shall assure that:
 - a. Urban development inside Tigard Urban Planning Area (T.U.P.A.) will be encouraged to annex to the City of Tigard.
 - b. Significant differences between City/County Comprehensive Plan policies are reconciled for the unincorporated areas within the Urban Planning Area (T.U.P.A.).
- 5. Land use designations, if not already designated, shall be assigned to purposed annexation areas only after a thorough study addressing statewide Planning Goals, and City and neighborhood needs have been completed and adopted by the City.
- 6. The City shall accept, encourage, and assist in the preparation of annexation proposals of all levels within its Urban Planning Area (UPA).
- 7. The City shall actively seek to include all "unincorporated island" areas into the city.
- 8. The City shall provide a capital improvement plan (CIP) that will promote the development of services and facilities in those areas which are most productive in the ability to provide needed housing, jobs and commercial service opportunities in conformance with the policies of the Comprehensive Plan. The CIP shall emphasize the provision of needed services in established districts and those areas passed over by urban development.
- 9. The City shall cooperate with Washington County and all special districts share in the exchange of information on planning actions which have interjurisdictional impacts. Ample opportunity for review and comment shall be given prior to final action by a city, county or special district policy making body on a matter of mutual concern.

10. The City and County will negotiate the existing Urban Planning Area agreement which responds to the needs of both the City and County.

10.3 ANNEXATION OF LAND OUTSIDE THE URBAN GROWTH BOUNDARY

POLICIES

- 10.3.1 THE CITY SHALL CONSIDER ANNEXATION REQUESTS OUTSIDE THE TIGARD URBAN PLANNING AREA AND WITHIN THE URBAN GROWTH BOUNDARY CONSISTENT WITH POLICIES 10.1 AND 10.2 AND AMENDMENT OF THE AGREEMENT BETWEEN THE CITY AND THE COUNTY.
- 10.3.2 THE CITY SHALL DISCOURAGE EXPANSION OF THE TIGARD URBAN PLANNING AREA IN A MANNER WHICH WOULD RESULT IN AN IRREGULAR PLANNING AREA AND INEFFICIENT PROVISION OF PUBLIC FACILITIES AND SERVICES.

11. SPECIAL AREAS OF CONCERN

The purpose of this chapter is to address those areas within each Neighborhood Planning Organization that are of special concern to each particular area.

This chapter is divided by Neighborhood Planning Organization. The subsequent policies address a broad range of issues and relate directly to the main Citywide policies in Chapters 1-10. The larger, bold number adjacent to each policy refers to the Citywide policy of Chapters 1-10.

11.1 NEIGHBORHOOD PLANNING ORGANIZATION #1

A. Central Business District

Findings

- The downtown area contains a broad mix of land uses, meeting the needs of many people within the planning area.
- A major concern of the Comprehensive Plan is to maintain existing business in the downtown area, and expand the economic potential of the downtown area.
- The Central Business District is the major commercial area in the planning area, and it provides professional, governmental, financial and cultural services. It also provides entertainment and open space.
- To successfully operate as a unified area, a Central Business District needs to:
 - a. Be compact;
 - b. Have ease of access to all facilities;
 - c. Have a broad cross section of appropriate commercial uses; and
 - d. Have adequate free parking in proximity to shopping.
- The Tigard downtown area is effectively served by mass transit facilities.

POLICY

- 11.1.1 THE REDEVELOPMENT OF DOWNTOWN TIGARD SHALL BE ACCOMPLISHED IN ORDER TO MAKE IT COMPLEMENTARY TO NEWER SHOPPING AREAS. CONVENIENCE, APPEARANCE AND THE NEEDS OF THE SHOPPING PUBLIC SHOULD BE PRIMARY CONSIDERATIONS.

IMPLEMENTATION STRATEGIES

1. The City shall emphasize the revitalization of the Central Business District within the economic development program. The CBD is a special area of concern for economic development activity.
2. The City shall coordinate and cooperate with the private sector to promote their participation in the revitalization of the Central Business District.

11.2 ASH AVENUE

Findings

- The extension of Ash Avenue is expected to increase traffic from the downtown area to the adjacent neighborhood; thus potentially increasing adverse impacts upon the adjacent neighborhood.
- Improvements to adjacent streets, e.g., Hill, O'Mara, etc., can alleviate traffic impacts on Ash Avenue.

POLICIES

- 11.2.1 ASH AVENUE SHALL BE EXTENDED ACROSS FANNO CREEK, ENABLING ACCESS TO THE NEIGHBORHOODS AND COMMERCIAL AREA WITHOUT USING PACIFIC HIGHWAY. DESIGN FEATURES SHALL BE USED TO SLOW TRAFFIC AND MAKE THE STREET AS SAFE AS POSSIBLE. ASH AVENUE SHALL BE DESIGNATED AS A MINOR COLLECTOR IN CONFORMANCE WITH THE MASTER STREET PLAN. DESIGN FEATURES AND MITIGATION MEASURES SHALL HOLD TRAFFIC VOLUMES TO THE MIDDLE LIMITS OF A MINOR COLLECTOR.
- 11.2.2 IMPROVEMENTS TO S.W. ASH AVENUE FROM S.W. HILL TO FANNO CREEK SHALL BE CONSTRUCTED AS A CONDITION OF DEVELOPMENT OF ADJACENT PROPERTIES. [THE] STREET IMPROVEMENTS ALONG WITH THE DEVELOPMENT OF A MAJOR COMMERCIAL SITE WILL INCREASE TRAFFIC ON ASH. A BARRICADE SHALL BE PLACED AT HILL STREET APPROXIMATELY AT THE END OF THE EXISTING PAVEMENT TO PROTECT [THE] NEIGHBORHOOD RESIDENTS FROM THE COMMERCIAL TRAFFIC.
- 11.2.3 METHODS OF MITIGATING THE TRAFFIC IMPACT ON THE NEIGHBORHOOD SHALL INCLUDE, IN THE FOLLOWING ORDER OF IMPROVEMENT, CONSTRUCTION:
- a. IMPROVING S.W. MCDONALD STREET TO INTERIM MAINTENANCE STANDARDS TO ENCOURAGE TRAFFIC FROM SOUTH OF MCDONALD TO USE MCDONALD TO EXIT TO HALL AND/OR PACIFIC HIGHWAY;
 - b. IMPROVEMENTS TO THE RESIDENTIAL PORTION OF ASH FROM HILL TO FREWING. THESE IMPROVEMENTS COULD INCLUDE LIMITED PARKING, DELINEATION OF TRAFFIC LANES AND SIDEWALKS ON ONE OR BOTH SIDES OF THE STREET;
 - c. EXTENSION OF S.W. HILL TO S.W. O'MARA AND/OR IMPROVEMENT OF S.W. ASH FROM FREWING TO GARRETT;
 - d. EXTENSION OF S.W. O'MARA TO S.W. HILL PARALLEL TO S.W. ASH;
 - e. REMOVAL OF THE BARRICADE IN PLACE ON ASH AVENUE AT S.W. HILL;
 - f. IMPROVEMENT OF S.W. O'MARA STREET TO INTERIM MAINTENANCE STANDARDS TO ENCOURAGE AN ALTERNATE ROUTE;
 - g. INSTALLATION OF TRAFFIC INHIBITORS TO THE RESIDENTIAL PORTION OF ASH IF AND WHEN TRAFFIC VOLUMES EXCEED THE MIDDLE RANGE FOR A MINOR COLLECTOR. TRAFFIC INHIBITORS INCLUDE BUT ARE NOT LIMITED TO PLANTING ISLANDS, SPEED BUMPS, BUTTONS, TURNING RESTRICTIONS, LOAD LIMITS AND ENFORCEMENT.

11.3 NEIGHBORHOOD PLANNING ORGANIZATION #3

Many of the older residential neighborhoods in NPO #3 were developed along country roads that were lightly traveled, but which are now more heavily traveled. Some of this increased traffic results from local development, and some of it is through traffic which must use these roads since no arterial route has been built. Further increases in traffic, and consequent widening of these roads may adversely impact the quality of the residences along these roads. This is particularly the case with 121st Avenue and Gaarde Street, which have rights-of-way of 40 to 50 feet that are offset in some places.

The comprehensive plan for NPO #3, adopted by the City of Tigard in 1975, supported and implemented the conclusions of Carl Buttke, the consulting engineer who performed the traffic studies for the various NPO's. These conclusions were that 121st Avenue and Gaarde Street should be developed as two lane roads limited to a total of 30 feet "to avoid motorists from forming a third lane, but providing sufficient roadway width for turning vehicles." The 1975 plan included provisions for these roads to have pedestrian-bicycle paths and to have restrictions on parking. Also, low densities were planned for the neighborhoods serviced by these streets; one reason was to avoid further overloading of these streets with additional traffic resulting from higher densities.

The City of Tigard, in the 1975 plan for NPO #3, opposed a proposed Murray Boulevard Extension through

NPO #3. It has been the opinion of both the City and the local residents that the Murray Boulevard Extension to Pacific Highway should be located to the west of Bull Mountain. Completion of this arterial linkage could remove much of the through traffic from what should be neighborhood collector streets.

Findings

- The development along most of the collector streets in NPO #3 is predominantly low density residences which are in good condition.
- The present right-of-way along much of S.W. 121st Avenue and S.W. Gaarde street is 40 to 45 feet wide with offsets in some places. Widening these streets to major collector standards would impact some of the existing homes on these streets.
- Some of the traffic now using S.W. 121st Avenue and Gaarde Street is not local, but rather through traffic, which could be better provided for by a properly located arterial connection between Murray Boulevard and Pacific Highway.
- Future development on the land along 121st and Gaarde will add to the traffic volumes on those streets.
- S.W. Gaarde Street and S.W. 121st Avenue south of Walnut both have many uncontrolled access points; this condition will require special design attention when street improvements are made.
- A direct connection between Murray Boulevard or Scholls Ferry Road, and Gaarde Street and/or 121st Avenue has been proposed many times in the past. A direct arterial connection proposal was considered in detail in the 1975 NPO #3 Plan and was emphatically rejected by the City of Tigard. It has also been rejected by the current NPO #3.

POLICIES

- 11.3.1 THE CITY SHALL CONSIDER THE FOLLOWING WHEN PREPARING STREET IMPROVEMENT PLANS THAT AFFECT S.W. 121ST AVENUE OR GAARDE STREET.
- a. THE IMPACT ON THE EXISTING RESIDENTIAL STRUCTURES AND THE ALTERNATIVES WHICH HAVE THE MINIMUM ADVERSE EFFECT IN TERMS OF:
 - 1. REDUCING THE DISTANCE BETWEEN THE DWELLING AND THE STREET; AND
 - 2. NOISE IMPACTS.
 - b. THE EFFECT THE IMPROVEMENT WILL HAVE ON THE TRAFFIC FLOW AND THE POSSIBLE NEGATIVE EFFECTS ON OTHER STREET INTERSECTIONS.
 - c. MINIMIZING THE USE OF THESE STREETS AS PART OF THE ARTERIAL SYSTEM FOR THROUGH TRAFFIC.
- 11.3.2 THE CITY OF TIGARD SHALL WORK WITH OTHER GOVERNMENTAL BODIES FOR THE DEVELOPMENT OF AN ARTERIAL ROUTE CONNECTION FROM MURRAY BOULEVARD OR SCHOLLS FERRY ROAD TO PACIFIC HIGHWAY. THIS ARTERIAL ROUTE SHOULD BE LOCATED WEST OF BULL MOUNTAIN, AND SHOULD NOT UTILIZE ROADS WHICH PASS THROUGH EXISTING RESIDENTIAL AREAS WITHIN TIGARD.

IMPLEMENTATION STRATEGIES

- 1. S.W. Gaarde Street and S.W. 121st Avenue (between Gaarde and Walnut) shall be developed as two-lane roads with pedestrian-bicycle paths, restricted parking and left turning lanes as needed at congested intersections.
- 2. The undeveloped land along S.W. 121st Avenue (south of Walnut) shall be planned for development in accordance with the locational criteria policies that apply to locating medium and higher densities close to arterials and in accordance with the policies for "Established" and "Developing" areas.
- 3. The Tigard Community Development Code shall require site design review for any development other

than a single or two family structure. The site design review shall include review of street right-of-way and pavement location.

11.4 NEIGHBORHOOD PLANNING ORGANIZATION #4

POLICIES

- 11.4.1 IN THE TIGARD TRIANGLE (I.E. THAT AREA BOUNDED BY PACIFIC HIGHWAY, HIGHWAY 217, AND THE INTERSTATE 5 FREEWAY), IN THE MIXED USE EMPLOYMENT ZONE, HIGH DENSITY RESIDENTIAL DEVELOPMENT (I.E., 25 UNITS PER ACRE) SHALL BE A USE ALLOWED OUTRIGHT.

11.5 NEIGHBORHOOD PLANNING ORGANIZATION #5

Findings

- As Tigard has continued to develop, the locational advantages associated with the I-5 freeway, Highway 217 and the two railroad lines traversing the area have led to a considerable amount of office and industrial development along 72nd Avenue, south of Highway 217.
- The established residential area abutting the industrial area in NPO #5 has been adversely affected by the individual use, due to increased smoke, noise, odor or visual pollution.
- The pollution of existing vegetation and trees, and the planting of trees, provide an excellent means to both separate and buffer residential areas from industrial areas. These vegetative buffers exist along the western slopes bordering the Rolling Hills Subdivision and along Fanno Creek. The Rolling Hills Subdivision abuts industrially planned land on two sides and is within approximately 600 feet of land planned for heavy industrial use.

POLICY

- 11.5.1 THE CITY SHALL REQUIRE BUFFERING AND SCREENING BETWEEN RESIDENTIAL AREAS AND ADJOINING INDUSTRIAL AREAS AS A PRECONDITION TO DEVELOPMENT APPROVAL AS FOLLOWS:
- a. ALL BUILDINGS ON INDUSTRIAL LAND SHALL BE SET BACK A DISTANCE OF 50 FEET FROM ANY PROPERTY LINE WHICH ABUTS A RESIDENTIALLY PLANNED AREA;
 - b. THE SITE PLAN SHALL PROVIDE FOR THE LEAST INTENSIVE PROPOSED USES ON THE SITE IN THE AREAS WHICH ABUT AN ADJOINING RESIDENTIAL PLANNED AREA; AND
 - c. BUFFERING AND SCREENING SHALL BE PROVIDED WITHIN THE 50-FOOT SETBACK AREA AS PROVIDED BY THE STANDARDS CONTAINED IN POLICY 6.6.1. IT IS NOT THE INTENT OF THIS SUBSECTION TO REQUIRE THE ENTIRE 50 FEET TO BE LANDSCAPED PROVIDED THE STANDARDS IN 6.6.1 ARE MET IN WHICH CASE A PORTION OF THE BUFFER AREA MAY BE USED FOR PARKING; EXCEPT
 1. NO STRUCTURE, PAVEMENT OR DEVELOPMENT MAY BE LOCATED WITHIN THE 50-FOOT SETBACK AREA SURROUNDING THE ROLLING HILLS SUBDIVISION EXCEPT LOTS # 39, 40, 41, 42, AND 43; AND
 2. ALL EXISTING VEGETATION SHALL BE RETAINED AND MAINTAINED WITHIN THE 50-FOOT SETBACK AREA SURROUNDING THE ROLLING HILLS SUBDIVISION EXCEPT BEHIND LOTS # 39, 40, 41, 42, AND 43 WHERE SECTION 18.100.130, THE BUFFER MATRIX, APPLIES AND 18.100.080 APPLIES.

(Rev. Ord. 84-70)

IMPLEMENTATION STRATEGIES

1. The City shall work with the Neighborhood Planning Organizations and the affected property owners (both residential and industrial) in developing a design plan for the buffer areas between industrial and residential areas.
2. The Tigard Community Development Code shall include a tree cutting section which will minimize the cutting of trees on undeveloped land, and prohibit the cutting of trees within the designated Fanno Creek Greenway area.
3. The Community Development Code shall include standards for industrial developments that abut residential districts. At a minimum these standards shall include height, noise and lighting requirements.

11.6 ACTION AREAS

Action Areas are designated on the land use map where transit service and pedestrian traffic are encouraged in conjunction with Commercial, Light Industrial and Medium, Medium-High and High Density Residential Use.

GOALS

- Reinforce the mutually supporting nature of intense land uses and high accessibility of major transit stations.
- Encourage the use of public transit and facilitate that use through land use and design controls.
- Encourage and facilitate pedestrian traffic through land use, circulation patterns and design controls.

POLICIES

- 11.6.1 DESIGNATE AS ACTION AREAS CONCENTRATIONS OF GENERAL COMMERCIAL, LIGHT INDUSTRIAL, MEDIUM, MEDIUM-HIGH, AND HIGH DENSITY RESIDENTIAL WHERE THE FOLLOWING CRITERIA ARE MET.
 - a. THE AREA IS GENERALLY WITHIN ONE-QUARTER MILE OF A MAJOR TRANSIT CENTER OR TRUNK ROUTE.
 - b. AREAS WITH EXISTING USES WHICH ARE FREQUENTED BY PEDESTRIANS, OR VACANT LAND WHICH COULD SUPPORT USES WHICH WOULD BE PATRONIZED BY PEDESTRIANS AND/OR TRANSIT RIDERS.
 - c. AREAS WHICH ARE CURRENTLY AUTOMOBILE ORIENTED MAY BE INCLUDED IN ANTICIPATION OF A CHANGE OF USE OR REDESIGN OF PEDESTRIAN WAYS TO BETTER INTEGRATE THE USE INTO THE ACTION AREA.
- 11.6.2 DETERMINE PERMITTED USES THROUGH ZONING. FURTHER REGULATION OF USES IN ACTION AREAS SHALL BE ACCOMPLISHED WITH AN OVERLAY ZONE WHICH LIMITS SPECIFIC AUTOMOBILE ORIENTED USES AS PERMITTED USES AND ENCOURAGES A HIGHER LEVEL OF USES WHICH ARE PEDESTRIAN AND PUBLIC TRANSIT ORIENTED.
- 11.6.3 REQUIRE THAT ALL DEVELOPMENT PERMITTED IN ACTION AREAS BE DESIGNED TO FACILITATE PEDESTRIAN MOVEMENT WITHIN THE CENTER AND TO TRANSIT.
- 11.6.4 REVIEW AND UPDATE CITY PARKING ORDINANCES TO RECOGNIZE PARKING NEEDS IN ACTION AREAS.
- 11.6.5 DEVELOP A DESIGN PLAN FOR EACH ACTION AREA TO PROVIDE GUIDANCE FOR FINANCING PUBLIC IMPROVEMENTS AND INTEGRATING VARIOUS LAND USES. PLANS FOR AUTOMOBILE, TRANSIT, PEDESTRIAN AND BICYCLE CIRCULATION, OPEN SPACE, STORM DRAINAGE, SEWERAGE AND LIGHTING WILL BE INCLUDED. THE CITY WILL HAVE THE PRIMARY RESPONSIBILITY FOR DEVELOPING THE DESIGN PLAN BUT WILL COORDINATE WITH OREGON DEPARTMENT OF TRANSPORTATION AND TRI-MET.

- 11.6.6 DEVELOPMENT IN THE ACTION AREAS MAY BE SUBJECT TO SPECIAL CIRCULATION AND DESIGN CONSIDERATIONS DURING DESIGN REVIEW PRIOR TO COMPLETION OF THE DESIGN PLANS.
- 11.6.7 ENCOURAGE FORMATION OF LOCAL IMPROVEMENT DISTRICTS OR OTHER SUITABLE PROGRAMS FOR EACH ACTION AREA TO FINANCE IMPLEMENTATION OF THE DESIGN PLANS.

(Rev. Ord. 87-55)

11.8 NEIGHBORHOOD PLANNING ORGANIZATION #8

In 1989, a major real estate development company, together with interested residents and property owners, proposed to the city a redevelopment concept for the area generally bounded SW Locust, SW Hall Boulevard, Highway 217 and SW Greenburg Road. The development concept would require the redevelopment of an existing single family area to a commercial office campus, and would require that the city establish an urban renewal plan to help fund needed public improvements and other projects.

The development concept also required that the Comprehensive Plan designations for portions of the area be changed from Low Density Residential to Commercial Professional, followed by corresponding zone changes from R-4.5 or R-12 to C-P in conjunction with the approval of a conceptual development plan.

Findings

- The City of Tigard together with a major real estate development company recognize the potential for a major planned commercial and office development in the area. A public/private partnership has been established and an urban renewal plan, entitled the President's Parkway Development Plan, has been prepared in order to implement the commercial development concept.
- Preliminary studies completed for the President's Parkway Development Plan have identified needed transportation, public facility, flood control and other improvement projects which will be necessary to serve commercial and office development expected for the area.
- Additional studies will be needed as more specific development plans are approved which refine projects which are already identified, and identify other projects which are not now known.
- The area is characterized as transitional, that is an existing single family district that is converting to commercial use. Characteristics of the area which support this conversion and contribute to the decline in livability for single family residents include:
 - Poor condition of residential streets not built to city standards
 - Lack of sidewalks, parks and other recreational facilities
 - Poor drainage conditions and occasional flooding
 - High traffic volumes on residential streets causing congestion and safety problems
 - An elementary school in the area which is at the very edge of its service area, is inappropriately located, and is in proximity to congested streets with high traffic volumes
 - Overall noise, congestion and high levels of activity in residential areas caused by the proximity of commercial and office uses
 - Declining residential land and property values
- Adjacent neighborhoods north of SW Locust and east of SW Hall are predominately single family residential. Residents of these areas have expressed concern about the potential traffic, noise, visual and other impacts which may result from the redevelopment of the subject area. Detailed planning and impact assessment is needed to ensure these neighborhoods are adequately buffered from these potential impacts.

- In order to obtain a sound, unified development of high quality, an overall development plan for the entire area is needed. A zone change, consistent with the commercial-professional Comprehensive Plan designation will not create an overall development plan and, therefore, an instrument other than a simple zone change is needed.
- The most appropriate method to formulate an overall development plan is through the use of the Planned Development Overlay District, City of Tigard Community Development Code.
- A Comprehensive Plan map amendment to Commercial Professional must precede any zone change to C-P.
- Changing the zoning to C-P, for the area is shown on Map 1, in advance of redevelopment and conversion from existing single family uses to commercial uses may cause problems for the city and for property owners. Single family properties would likely be assessed for their zoned office potential, thereby increasing property taxes. It is not necessary or desirable to change the existing zoning until the land is needed for redevelopment consistent with the commercial Professional Comprehensive Plan Designation and an adopted Planned Development Overlay District.
- Necessary public improvements should be in place or planned to be constructed in time to support each phase of development, and to offset impacts caused by each development phase. Public improvements and other measures should address impacts within the redevelopment area and in adjacent neighborhoods. Development should not proceed until necessary funding for these public improvements is available and secured.

(Rev. Ord. 90-26; Ord. 90-07; Ord. 90-06)

11.9 WASHINGTON SQUARE REGIONAL CENTER

In 1995, Metro Council adopted a visionary plan for regional development. The 2040 Growth Concept described strategies to make the most efficient use of urban land in the face of dramatic population growth, to create and preserve livable neighborhoods, and to promote a useful, accessible transportation system.

One of the key elements of the 2040 Growth Concept, was the designation of regional centers. These are areas of concentrated commerce, local government services and housing served by high-quality transit. Washington Square is one of three regional centers in Washington County and one of nine in the region.

The 2040 Growth Concept resulted from extensive regional discussion about the future of the Portland metropolitan area. Metro, working with local jurisdictions, then developed the Urban Growth Management Functional Plan in 1996 to implement the Growth Concept. Local citizens and governments were then to determine the best way to create regional centers given the values, interests and needs of residents and businesses of that community.

The following findings and policies summarize the results of a thorough public discussion about the future of the Washington Square Regional Center area. It demonstrates the way the people of Tigard and Washington County incorporated their expectations for the future into the Regional Center Plan.

Findings

- With the adoption of the Urban Growth Management Functional Plan, local governments, businesses, residents and property owners in Washington County began a study of land use, transportation and other functions around Washington Square.
- In 1998, the Tigard City Council appointed 23 people to serve on the Washington Square Regional Center Task Force. Task Force members represent neighborhoods, schools, business and property owners, state and local governments and public interest groups. The task force's charge was to identify issues and set general policy for recommendations about land use, transportation, open space, aesthetics and other issues relevant to development around Washington Square. The Task Force also oversaw a public involvement process.
- The Task Force agreed on a study area that includes 1250 acres, with Washington Square Mall approximately in the center. The area is bounded by Fanno Creek on the west, SW Greenburg Road and Hall Blvd. on the east, Progress Downs Golf Course to the north, and Highway 217 and Ash Creek on the south.
- The Task Force members agreed on a set of principles that would guide development of all

recommendations. These principles are as follows:

Creation/Preservation of Area Identity

- Reinforce a distinctive Regional Center while recognizing and respecting the character of the nearby residential community.
- Retain and develop quality housing, including affordable housing, for all income levels.
- Facilitate transitions from one use to another; for example, single to multifamily residential uses.
- Preserve and enhance Metzger Park and consider additional parks.
- Encourage environmentally friendly development.
- Try to keep historic trees.
- Build for our children: Have a sense of stewardship.
- Think creatively and be innovative in improving/maintaining quality of life.
- Consider market forces and development patterns.
- Maintain and preserve floodplains and wetlands.

Government/Institutional Issues

- Consider all political boundaries and facilitate cooperation among jurisdictions.
- Maintain neighborhood schools.
- Identify and reinforce what makes the learning (educational) environment viable.

Transportation

- Strive for a self-sufficient, connected transportation system.
- Consider transportation needs for the whole study area.
- Plan for a multi-modal transportation system that accommodates increased auto and non-auto travel needs.
- Respect and enhance local street networks and neighborhood livability.
- Maintain an acceptable level of service and safety on regional roads, minimizing the effect on regional roads outside the study area.
- Provide good transportation access to the rest of the region.
- Make the community accessible for all people and modes with connections for cars, bikes, pedestrians and transit.
- Maintain a high level of accessibility within and to the regional center.
- Use appropriate street and streetscape design.
- Encourage attractive, high quality development.
- Promote long-term viability for the area. Assure infrastructure is available prior to or with development.

The Regional Center Plan Should

- Be understandable to lay people
 - Be implementable within a reasonable, staged period of time
 - Help develop a sense of community with a common vision, hope and optimism
 - Be based on statistics and facts for population, employment and other factors
 - Use existing resources as much as possible
 - Encourage compatible and complementary uses
 - Contain solutions to common problems
 - Avoid conflict with other regional centers.
-
- The Washington Square Regional Center study area includes land within the City of Tigard, the City of Beaverton and in unincorporated Washington County. The study covers approximately 1,074 acres exclusive of public rights-of-way and 1,250 total acres. About 4.2 percent of the net land area within the study area is vacant.
 - The Task Force evaluated all lands within the study area for future development or redevelopment capacity through 2020. Land identified as having development or redevelopment potential if it is currently vacant, has infill capacity, holds an opportunity for redevelopment or currently is used as a large (greater than one acre) surface parking lot. The vast majority of growth potential will come from redevelopment of existing structures and infill on sites currently used for surface parking. Over the next 20 years, approximately 192 acres of land will become available to accommodate employment and residential growth within the study area.

- Metro's Regional Urban Growth Management Functional Plan established "target growth capacity" for each jurisdiction in the region. The goal of setting these target numbers is for each part of the region to be prepared to accommodate housing and job growth. The target growth capacity for the Washington Square Regional Center is based on accommodating the following new jobs and housing units between 1998 and 2020:

Employment:	9,804 jobs
Retail:	1,188 jobs
Office:	8,436 jobs
Lodging:	180 jobs
Housing:	1,500 units
Residents:	2,530 people

- A development program for the Washington Square Regional Center provides for the target employment and housing growth capacity. Areas including the districts around the Washington Square Mall, the Lincoln Center office complex, and an emerging mixed-use district south of Locust will develop at relatively high densities. Areas north of Locust and west of Highway 217 will develop at more moderate intensities, but generally greater than existing intensity in these areas. Density assumptions are summarized below:

Land Use:	High Density:	Moderate Density:
Office	@ FAR 1.25	@ FAR 0.6
Retail	@ FAR 0.6	@ FAR 0.3
Lodging	@ FAR 1.0	@ FAR 1.0
Housing	@ 50 DU/Acre	@ 25 DU/Acre

- This development program will require approximately 170-200 acres over the next 20 years. Adequate development and redevelopment capacity exists within the study area as a whole to accommodate development as long as densities assumed above are achieved.
- The Regional Center Task Force reached agreements on basic elements of urban development, environmental protection, and transportation facilities. The Washington Square Regional Center Plan describes the vision for the regional center.
- The Task Force demonstrated an impressive amount of interest in mixed-use neighborhoods and developments. Increasing land value and transportation costs will contribute to the desire of workers and employers for proximity of housing and work sites. The regional center's urban design concept incorporates the need for improved transportation links, higher density, variety of land uses and services and a quality of environment necessary to create a desirable, livable community in the face of dramatic population growth.
- Major roadways in the study area experience significant traffic congestion during weekday peak periods. Highway 217, Greenburg Road, Hall Boulevard and Scholls Ferry Road are subject to traffic delays. The major capacity constraints occur at the Hall Boulevard/Scholls Ferry Road intersection, the Scholls Ferry Road/Nimbus Avenue intersection, and the Greenburg Road/Highway 217 ramp intersections. In addition, Highway 217 itself is highly congested.
- The majority of the arterial and collector streets in the study area have sidewalks. Scholls Ferry Road and Hall Boulevard have bike lanes within the study area. Highway 217 presents a major barrier for pedestrians and bicyclists. The only connections between the east and west sides of the highway in the study area are overcrossings on Hall Boulevard, Scholls Ferry Road and Greenburg Road. Of these three crossings, sidewalks are found only on Hall Boulevard and Greenburg Road, with bicycle lanes only on Scholls Ferry Road. The only bike lanes on the east side of the Washington Square Mall are on Hall Boulevard.
- The Washington Square Transit Center is located in the northeast parking area of the Washington Square Mall. This transit center serves as a bus stop for routes 43, 45, 56, 62, 76 and 78. These routes connect Washington Square to transit centers in downtown Portland, Beaverton, Tigard and Lake Oswego, as well as providing service to the Tualatin area. A wider selection of transit tools could create a less congested, auto-dependent transportation system within and connecting to the study area.

- In the future, those areas already identified as experiencing traffic congestion will continue to be clogged. In addition, other sections of Hall Boulevard, Greenburg Road, and Cascade Avenue and Oleson Road will also experience congestion. Traffic estimates do not predict congestion on local Metzger area streets directly east of Washington Square Mall.
- The Tigard City Council approved the Washington Square Regional Center Plan, September 1999 (WSRC Plan) and related Comprehensive Plan and Zoning Code amendments, but withheld enactment of these policies and standards until a number of transportation, natural resource, stormwater, and parks and open space issues were addressed.
- The City provided resources and secured grants from the Transportation and Growth Management (TGM) Program, State of Oregon, and the Department of Land Conservation and Development (DLCD), State of Oregon, to undertake additional technical studies to address these issues during the Phase II Implementation process.
- The Phase II Implementation work effort focused on a number of issues that were first articulated by the Tigard City Council, and then defined as charges to the Task Force, Subcommittees. These charges were:
 - Advise whether the major transportation improvements identified in the Regional Center Plan are physically feasible, and whether environmental or other permitting issues represent a “fatal flaw” for project implementation.
 - Determine whether the proposed Regional Center Plan zoning creates the need for significant additional transportation improvements compared with existing zoning.
 - Prepare a transportation demand management strategy for the Regional Center.
 - Develop a long-range transportation implementation program that addresses public policy, financial resources and responsibilities, and short-term priorities.
 - Map and confirm the hydrological characteristics (wetlands and fish habitat) of the Fanno and Ash Creek Watersheds within the Regional Center.
 - Compile policies and standards for these watersheds related to development impacts, including the extent that parks and open spaces activities can exist within the 100-year floodplain area.
 - Recommend modifications (as necessary) to the City’s natural resource regulations.
 - Assess the stormwater management needs for the Regional Center Plan and a recommended approach for storm water management.
 - Develop a long-term funding strategy for storm water management.
 - Confirm the parks and open space needs for the Regional Center Plan and a recommended approach for identifying, acquiring, improving and maintaining parks and open space in the area.
 - Develop a long-term funding strategy for parks/open space.
- Based on the work of the Task Force, Technical Subcommittees, and consultation with the public, the following findings and conclusions are made:
 - The results of the engineering and environmental analysis show that all of the transportation recommendations from the WSRC Plan can be implemented, and none of the projects are fatally flawed.
 - A comparison of traffic trip generation potential of current zoning within the Regional Center to that proposed in the WSRC Plan showed very similar future peak hour trips, and that the transportation system required to serve the WSRC Plan is the same as that required to serve the area under current zoning.
 - A long-term transportation implementation program is described later in this report, including a transportation demand management strategy. A financing strategy is recommended that produces sufficient revenues over a 20-year period to implement the improvement program.
 - Detailed field reconnaissance was undertaken, and existing vegetative communities and wetlands within the Regional Center were mapped. It is recommended that the Tigard Wetlands and Stream Corridors Map be amended to reflect this work.
 - Existing federal, state and local regulations and impact review procedures applicable to public and private developments within the Regional Center address the protection of identified natural resource areas. These existing regulations and any new regulations protecting natural resources take precedence over any local zoning designations, existing or proposed.
 - Proposed zoning designations applying to resource areas do not in and of themselves threaten natural resource values or potentially cause environmental impacts any more or less significantly compared to existing or less intensive zoning.
 - Modifications to City of Tigard development standards that apply to sites that include natural resource areas along Ash and Fanno Creeks are recommended in order to minimize

- environmental impacts. Applicable development standards include waiving minimum FAR and residential density standards, adjusting building setbacks and others.
- The results of an assessment of existing and future flooding and water quality needs within the Regional Center showed that existing stormwater facilities are inadequate, and identified regional stormwater improvements remain unfunded.
 - A long-term stormwater management program is described later in this report. A financing strategy is recommended that produces sufficient revenues over a 20-year period to implement the improvement program.
 - A Greenbelt, Parks and Open Spaces Concept Plan is recommended which refines the proposals made in the WSRC Plan. All elements of the Concept Plan were found to be feasible.
 - A long-term greenbelt, parks and open spaces implementation program is described later in this report. A financing strategy is recommended that produces sufficient revenues over a 20 year period to implement the improvement program.
- A financing strategy was developed in detail for transportation, stormwater, and parks & open space improvements. Based on the analysis of revenue expected from the variety of sources described in the strategy, adequate resources were determined to be available during the next 20 years to adequately fund the public improvements necessary to implement the WSRC Plan. The primary elements of the financing strategy are:
 - Aggressively pursue federal highway trust fund sources through Metro's Metropolitan Transportation Improvement Program (MTIP). Metro estimates that approximately \$874 million in federal highway trust fund money will be allocated directly to the Metro region during the years 2000 through 2020.
 - Establish priorities so that locally generated fees from existing businesses and residents and new development activity located within the Regional Center are focused on the transportation and infrastructure needs within the Regional Center.
 - Pursue the formation of local improvement district(s) (LIDs) where existing businesses and residents will directly benefit from improvements to existing transportation and stormwater facilities, or relatively modest new improvements are needed that benefit multiple property owners.
 - Aggressively pursue regional, state, and national grants and funding programs for specific improvements, and pursue dedications, donations and contributions from the private sector.
 - Establish an urban renewal district for the Regional Center as a local funding source for major transportation, stormwater, resource enhancement and parks and open space improvements that benefit the entire area. Based on the growth projection utilized for the Washington Square Regional Center Plan, approximately \$92-162 million in accumulated urban renewal revenues would be available for project activities within the Regional Center over a 20-year period. An important recommendation of the financial strategy is the creation of a new urban renewal district. It is recommended that the urban renewal district be created to include areas within the City of Tigard, City of Beaverton, and unincorporated Washington County. This will assure that the entire Regional Center will be eligible for urban renewal investments.

POLICIES

- 11.9.1 THE CONCEPTS AND PRINCIPLES CONTAINED IN THE WASHINGTON SQUARE REGIONAL CENTER PLAN SHALL PROVIDE THE OVERALL GUIDING FRAMEWORK FOR MORE DETAILED IMPLEMENTING ACTIONS FOR THE AREA. THE IMPLEMENTING ACTIONS INCLUDE AT A MINIMUM:
- a. Comprehensive plan map and zoning map amendments including transportation plan.
 - b. A public facilities plan for the area including a financing plan.
 - c. A transportation improvement plan for the area including a financing plan.
 - d. A parks and open space plan for the area including a financing plan.
 - e. A recognition of the Regional Center Boundary for the purpose of establishing local, regional and state funding priority in order to accomplish the concepts and principles of the plan.
- 11.9.2 THREE DISTINCT TYPES OF MIXED USE DISTRICTS SHALL BE ESTABLISHED FOR THE

WASHINGTON SQUARE REGIONAL CENTER. THESE DISTRICTS ARE:

- a. MIXED USE COMMERCIAL DISTRICTS (MUC). THE REGIONAL CENTER PLAN RECOMMENDS THAT LAND AROUND THE WASHINGTON SQUARE MALL AND LAND IMMEDIATELY WEST OF HIGHWAY 217 BE DESIGNATED A MIXED USE COMMERCIAL DISTRICT. PRINCIPAL DEVELOPMENT IN THESE AREAS WILL BE OFFICE BUILDINGS, RETAIL AND SERVICE USES. A ZONING DESIGNATION OF MUC WILL ALSO ALLOW MIXED-USE DEVELOPMENT AND HOUSING AT DENSITIES OF 50 UNITS AN ACRE. MUC DISTRICTS WILL ENCOURAGE LARGER BUILDINGS WITH PARKING UNDER, BEHIND OR ALONGSIDE THE STRUCTURES.
- b. MIXED USE EMPLOYMENT DISTRICT (MUE). MIXED USE EMPLOYMENT DISTRICTS REFER TO AREAS WITH CONCENTRATIONS OF OFFICE, RESEARCH AND DEVELOPMENT, AND LIGHT MANUFACTURING INDUSTRIAL USES. COMMERCIAL AND RETAIL SUPPORT USES ARE ALLOWED, BUT ARE LIMITED. THE ZONING WILL PERMIT RESIDENTIAL DEVELOPMENT COMPATIBLE WITH THE DISTRICT'S EMPLOYMENT CHARACTER. LINCOLN CENTER IS AN EXAMPLE OF AN AREA DESIGNATED MUE-1, THE HIGH DENSITY MIXED-USE EMPLOYMENT DISTRICT. THE NIMBUS AREA IS DESIGNATED MUE-2, REQUIRING MORE MODERATE DENSITIES.
- c. MIXED USE RESIDENTIAL DISTRICTS (MUR). THE MUR DESIGNATION IS APPROPRIATE FOR PREDOMINANTLY RESIDENTIAL AREAS WHERE MIXED USES ARE PERMITTED WHEN COMPATIBLE WITH THE RESIDENTIAL USE. AREAS WILL BE DESIGNATED HIGH DENSITY (MUR-1) OR MODERATE DENSITY (MUR-2).

11.9.3 NECESSARY PUBLIC FACILITIES INCLUDING SEWER, WATER AND DRAINAGE FACILITIES, SHOULD BE IN PLACE OR PLANNED TO BE CONSTRUCTED IN TIME TO SUPPORT NEW DEVELOPMENTS.

11.9.4 NECESSARY TRANSPORTATION FACILITIES, AS DETERMINED BY A TRAFFIC IMPACT ASSESSMENT, SHOULD BE IN PLACE OR PLANNED TO BE CONSTRUCTED IN TIME TO SUPPORT NEW DEVELOPMENTS.

(Rev. Ord. 02-12)

11.10 DURHAM QUARRY MIXED USE DEVELOPMENT AREA

In 1999, the City of Tigard, the City of Tualatin and the property owner, Washington County, agreed to work together to encourage a high quality, pedestrian-friendly, transit-oriented mixed use development on the site of the Durham Quarry site. Only 7.2 acres of the 28-acre site are within the City of Tigard, the remainder is within the City of Tualatin. The jurisdictions have been working together to develop an intergovernmental agreement wherein the City of Tigard would authorize the City of Tualatin to make land use and building permit decisions for the portion of the quarry site within Tigard.

POLICIES

- 11.10.1 THE CITY OF TIGARD WILL CONTINUE TO WORK WITH WASHINGTON COUNTY AND THE CITY OF TUALATIN TO HELP ASSURE THAT DEVELOPMENT WITHIN THE DURHAM QUARRY MIXED USE DEVELOPMENT AREA PROVIDES A HIGH QUALITY URBAN ENVIRONMENT THAT EMPHASIZES PEDESTRIAN CONNECTIVITY.
- 11.10.2 THE DURHAM QUARRY MIXED USE DEVELOPMENT AREA SHALL BE SUBJECT TO AN INTERGOVERNMENTAL AGREEMENT WITH THE CITY OF TUALATIN WHICH WOULD AUTHORIZE THE CITY OF TUALATIN TO MAKE LAND USE AND BUILDING PERMIT DECISIONS FOR THE PORTION OF THE QUARRY SITE WITHIN TIGARD.
- 11.10.3 A UNIQUE MIXED USE DISTRICT HAS BEEN ESTABLISHED FOR THE DURHAM QUARRY MIXED USE DEVELOPMENT AREA KNOWN AS MUC-1.

- 11.10.4 THE MUC-1 DISTRICT IS INTENDED TO PROMOTE DEVELOPMENT WHICH ALLOWS A MIX OF USES, INCLUDING RETAIL, SERVICES, OFFICE AND RESIDENTIAL. THE MIXED USE COMMERCIAL DESIGNATION SHOULD ENCOURAGE DEVELOPMENTS THAT ALLOWS PEOPLE TO WORK, SHOP AND LIVE IN A COMPACT, PEDESTRIAN-ORIENTED COMMUNITY.
- 11.10.5 NECESSARY PUBLIC FACILITIES INCLUDING SEWER, WATER AND DRAINAGE FACILITIES, SHOULD BE IN PLACE, OR PLANNED TO BE CONSTRUCTED, IN TIME TO SUPPORT NEW DEVELOPMENT.
- 11.10.6 NECESSARY TRANSPORTATION FACILITIES, AS DETERMINED BY A TRAFFIC IMPACT ASSESSMENT, SHOULD BE IN PLACE, OR PLANNED TO BE CONSTRUCTED, IN TIME TO SUPPORT NEW DEVELOPMENT.

(Rev. Ord. 01-07)

12. LOCATIONAL CRITERIA

INTRODUCTION

This section contains locational criteria policies with respect to:

- Housing;
- Commercial uses;
- Offices;
- Industry; and
- Public utilities and facilities.

The policies and locational criteria apply to both legislative and quasi-judicial land use actions.

Conformance of quasi-judicial land use actions with this section of the Comprehensive Plan shall be determined by evaluation of the relationships between the proposed action (e.g., zone change, conditional development) and the applicable locational criteria. The applicable criteria are determined by the scale of the proposal, measured according to the scale standards found in the charts which follow.

It is intended that these locational criteria be construed in a flexible manner, in the interest of accommodating proposals which, though not strictly in conformance with the applicable criteria, are found to be in the public interest and capable of harmonious integration into the community. The burden of proving conformance of the proposal to the Comprehensive Plan should vary with the degree of change and impact on the community: the more drastic the change and the greater the impact, the more strictly the criteria should be construed.

12.1 RESIDENTIAL

The allowed housing types will be determined by the locational criteria, allowed densities and Community Development Code provisions related to each zoning district.

POLICY

12.1.1 THE CITY SHALL PROVIDE FOR HOUSING DENSITIES IN ACCORDANCE WITH:

- a. APPLICABLE PLAN POLICIES;
- b. APPLICABLE LOCATIONAL CRITERIA; AND
- c. APPLICABLE COMMUNITY DEVELOPMENT CODE PROVISIONS.

(Rev. Ord. 85-03)

The following criteria will apply to the four residential densities:

1. Low Density Residential.

A. The following areas are designated low density residential on the plan map:

- (1) Areas which are committed to low density development and not shown on the "buildable lands inventory" as vacant land;
- (2) Areas where street facilities are limited to collectors and local streets;
- (3) Areas having development limitations due to the topography, soil characteristics, drainage, high water table or flooding; and

(4) Areas with limited capacity for development in terms of facilities and services such as:

(a) Facilities:

- (i) Sewer
- (ii) Water
- (iii) Drainage
- (iv) Schools

(b) Services:

- (i) Police
- (ii) Fire
- (iii) Health

B. The following factors will be determinants of the density ranges allowed through zoning in low density residential:

- (1) Areas which have been historically developed with large lots and which are determined to be committed land "on the buildable lands inventory" will remain zoned consistent with the existing development pattern;
- (2) The capacity of facilities and services;
- (3) Areas within walking distance of transit should be zoned for smaller lots; and
- (4) Areas within close proximity to jobs, commercial areas and public facilities and services should be zoned for smaller lots.

2. Medium Density Residential

A. The following factors will be the determinants of the areas designated for medium density on the plan map:

- (1) Areas which are not committed to low density development;
- (2) Areas which have direct access from collector or arterial streets;
- (3) Areas which are not subject to development limitations such as topography, flooding, poor drainage;
- (4) Areas where the existing facilities have the capacity for additional development;
- (5) Areas within one-half mile of public transportation; and
- (6) Areas which can be buffered from low density residential areas in order to maximize the privacy of established low density residential areas;

B. The following factors will be determinants of density ranges allowed through zoning in the medium density planned area:

- (1) The density of development in areas historically zoned for medium density development;
- (2) The topography and natural features of the area and the degree of possible buffering from established low density residential areas;
- (3) The capacity of the services;
- (4) The distance to the public transit;
- (5) The distance to neighborhood or general commercial centers and office business centers; and
- (6) The distance from public open space.

3. Medium-High and High Density Residential

- A. The following factors will be the determinants of the areas designated for high density on the plan map:
- (1) Areas which are not committed to low density development;
 - (2) Areas which can be buffered from low density residential areas in order to maximize the privacy of established low density residential areas;
 - (3) Areas which have direct access from a major collector or arterial street;
 - (4) Areas which are not subject to development limitations;
 - (5) Areas where the existing facilities have the capacity for additional development;
 - (6) Areas within one-quarter mile of public transit;
 - (7) Areas within one-quarter mile from neighborhood and general commercial shopping centers or business and office centers; and
 - (8) Areas adjacent to either private or public permanent open space.
- B. The following factors will be determinants of the density ranges allowed in the medium-high and high density planned areas should the City adopt more than one high density zone:
- (1) The topography and natural features of the area and the degree of possible buffering from established low density residential areas;
 - (2) The capacity of the services;
 - (3) The distance from public transit; and
 - (4) The relationship of the site to existing neighborhood and general commercial centers and office and business centers.

IMPLEMENTATION STRATEGIES

1. The Community Development Code shall:
- a. Include a broad range of residential districts;
 - b. Provide for schools, churches, parks and other quasi-public and public uses as conditional development in the residential districts;
 - c. Require medium density, medium-high density and high density residential uses to be subject to the design review process, unless those developments have received detailed planned development or conditional development approvals;
 - d. Require medium density and high density residential developments to provide a minimum of 20% of the gross area to be landscaped. The landscaping requirement may be reduced during the review process where it can be demonstrated that exceptional design will achieve:
 - (1) An equally desirable development; and
 - (2) An uncluttered appearance and openness intended by the landscaping requirement;
 - e. Require the dedication of land or monetary contribution to the public for parks or recreation facilities.

12.2 COMMERCIAL

The Comprehensive Plan provides for four types of commercial development: neighborhood, general commercial areas, professional commercial and the central business district. It is the intent of the plan that:

1. Commercial areas be planned at a scale which relates its location, site and type of stores to the trade area to be served;
2. Surrounding residential areas be protected from any possible adverse effects in terms of loss of privacy, noise, lights and glare;
3. Commercial centers and uses be aesthetically attractive and landscaped;
4. Ingress and egress points not create traffic congestion or hazards;
5. Vehicle trips be reduced both in terms of the length of vehicle trip and total number of trips; and
6. The central business district is not included in the locational criteria because there is only one designated area.

POLICY

12.2.1 THE CITY SHALL:

- a. PROVIDE FOR COMMERCIAL DEVELOPMENT BASED ON THE TYPE OF USE, ITS SIZE AND REQUIRED TRADE AREA.
- b. APPLY ALL APPLICABLE PLAN POLICIES.
- c. APPLY THE APPROPRIATE LOCATIONAL CRITERIA APPLICABLE TO THE SCALE OF THE PROJECT.

1. Neighborhood Commercial

Neighborhood commercial centers are intended to provide convenience goods and services within a cluster of stores. Convenience goods are goods which are bought frequently, at least weekly, and for which people do not engage in comparison shopping. The uses permitted in the neighborhood center include convenience markets, beauty shops, barber shops and repair shops. The range of uses is limited to those uses which can be sustained by a limited trade area.

A. Scale

- (1) Trade Area. Up to 5000 people.
- (2) Site Size. Two acre maximum.
- (3) Gross Leasable Area. Varies.

B. Locational Criteria

- (1) Spacing and Location
 - (a) The service area radius for a neighborhood commercial center shall be at least one-half [of a] mile.
 - (b) Commercial development shall be limited to one quadrant of a street intersection or where there is no street intersection, to one side of the street.

- (2) Access
 - (a) The proposed center or expansion of an existing center shall not create traffic congestion or a traffic safety problem. Such a determination shall be based on the street capacity, existing and projected traffic volumes, the speed limit, number of turning movements and the traffic generating characteristics of the most intensive use allowed in the zone.
 - (b) The site shall have direct access from one of the following:
 - (i) An arterial; or
 - (ii) A collector street which will not direct traffic through local neighborhood streets.
- (3) Site Characteristics
 - (a) The site shall be of a size which can accommodate [the] present and future uses, but shall not exceed two acres.
- (4) Impact Assessment
 - (a) The scale of the project shall be compatible with the surrounding uses.
 - (b) Site configuration and characteristics, and relationship to the street system, shall be such that privacy of adjacent non-commercial uses can be maintained.
 - (c) It shall be possible to incorporate the unique features into the site design and development plan.
 - (d) Associated lights, noise and activities shall not interfere with adjoining non-residential uses.

2. General Commercial

General Commercial areas are intended to provide for major retail goods and services. The uses classified as general commercial may involve drive-in services, large space users, a combination of retail, service, wholesale and repair services or provide services to the traveling public. The uses range from automobile repair and services, supply and equipment stores, vehicle sales, drive-in restaurants to laundry establishments. It is intended that these uses be adjacent to an arterial or major collector street.

A. Scale

- (1) Trade Area. Varies.
- (2) Site Size. Depends on development.
- (3) Gross Leasable Area. Varies.

B. Locational Criteria

- (1) Spacing and Location
 - (a) The commercial area is not surrounded by residential districts on more than two sides.
- (2) Access
 - (a) The proposed area or expansion of an existing area shall not create traffic congestion or a traffic safety problem. Such a determination shall be based on street capacity, existing and projected traffic volumes, the speed limit, number of turning movements and the traffic generating characteristics of the various types of uses.
 - (b) The site shall have direct access from a major collector or arterial street.

- (c) Public transportation shall be available to the site or general area.
- (3) Site Characteristics
 - (a) The site shall be of a size which can accommodate present and projected uses.
 - (b) The site shall have high visibility.
- (4) Impact Assessment
 - (a) The scale of the project shall be compatible with the surrounding uses.
 - (b) The site configuration and characteristics shall be such that the privacy of adjacent non-commercial uses can be maintained.
 - (c) It shall be possible to incorporate the unique site features into the site design and development plan.
 - (d) The associated lights, noise and activities shall not interfere with adjoining non-residential uses.

3. Commercial Professional

Commercial Professional areas are intended for a diverse range of office uses and supportive uses and to promote user convenience throughout the City.

A. Scale

- (1) Trade area. Varies
- (2) Site size. Varies
- (3) Gross leasable area. Varies

B. Locational Criteria

- (1) Spacing and Location
 - (a) The Comprehensive Plan map fixes exact boundaries of the commercial professional area.
 - (b) The commercial professional area is not surrounded by residential districts on more than two sides.
- (2) Access
 - (a) The proposed use or expansion of an existing area shall not create traffic congestion or a traffic safety problem. Such a determination shall be based on [the] street capacity, existing and projected traffic volumes, the speed limit, number of turning movements and the traffic generating characteristics of the various types of uses.
- (3) Site Characteristics
 - (a) The site shall be of a size which can accommodate present and projected needs.
 - (b) The site shall have high visibility.
- (4) Impact Assessment
 - (a) The site configuration and characteristics shall be such that the privacy of adjacent non-commercial uses can be maintained.

- (b) It shall be possible to incorporate the unique site features into the site design and development plan.
- (c) Associated lights, noise and activities shall not interfere with adjoining non-residential uses.

4. Community Commercial

The community commercial Plan designation is intended to provide locations for retail and service uses which have a primarily neighborhood orientation. Such facilities should be located so that their frequency and distributional pattern reflect their primary neighborhood orientation. Such facilities should not be so large or so broad in scope and services as to attract substantial amounts of trade from outside of surrounding neighborhoods, and shall be large enough to provide a variety of goods and services at one location. It is further the intent of this designation to restrict the size of such facilities and that the community commercial plan designation should not be located in close proximity to other commercial areas so as to avoid the appearance and feeling of typical commercial strip development.

A. Scale

- (1) Trade Area: Surrounding residential and neighborhoods generally within a 1 and 1/2 mile radius.

Trade Area Density: The surrounding area potential residential density within one-half mile of a site to be designated for community commercial development shall average at least eight units per acre (as determined by the zoning of properties within one-half mile of the community commercial site. The intention of this criterion is to locate community commercial sites within a relatively short distance of a significant number of potential frequent users of the establishments within the commercial center. This also will provide the residents of the surrounding area with an opportunity to provide for their commercial and service needs within a distance that is reasonable for walking or bicycling. Lesser residential densities may or may exist within the assumed trade area at further distances from the site.

- (2) Gross Floor Area. 30,000 to 100,000 square foot gross commercial floor area.

Food sales up to 40,000 square foot per establishment;

General retail sales up to 10,000 square foot per establishment as permitted uses;

Other commercial sales and services facilities shall be allowed up to 5,000 square foot in size per establishment.

B. Locational Criteria

- (1) Spacing and Location

- (a) Commercial development shall be limited to one quadrant of a street intersection.
- (b) Community commercial districts shall be spaced at least one-half mile from other sites which area designated for commercial retail use. Special consideration may also be given to providing a similar separation from non-commercially designated sites that involve retail use as part of a mixed use development, or to provide less than the minimum separation for commercially designated sites which are developed with non-retail uses.

- (2) Access

- (a) The proposed community commercial district shall not be anticipated to create traffic congestion or a traffic safety problem. Such a determination shall be based on the capacity of adjacent streets, existing and projected traffic volumes, roadway geometry of adjacent streets, number of turning movements, and the traffic generating characteristics of the most intensive uses allowed in the zone.

- (b) The site shall be located along an arterial or a major collector street as designated on the Comprehensive Plan Transportation Map. Sites should either be located at or adjacent to an intersection of a major or minor collector street with an arterial or at the intersection of two major collector streets.
- (3) Site Characteristics
 - (a) The site shall be a minimum of two acres in size and a maximum of eight acres in size.
- (4) Impact Assessment
 - (a) The scale and intensity of the project shall be compatible with surrounding uses and consistent with the provisions of this plan. Such compatibility and consistency shall be accomplished through the approval of a Site Development Review application contemporaneous with, and a part of, the approval of a zone change to the community commercial designation. The site plan approval may include conditions relating to site and building development through conditions of approval of a zone change for the site. Such considerations may include, but are not limited to, any of the site building and design guidelines deemed appropriate to become mandatory, access limitations, special setbacks, increased landscaping or buffering, limits on off-street parking spaces, coordinated building design, special design considerations for pedestrian and bicyclist access and safety and other building and site design standards imposed by the City in the plan amendment or rezoning process. Any major modification to the site plan, as determined by the Community Development Code, shall be processed as a zone change. Other modifications shall be processed in accordance with existing Code provisions.
 - (b) It is generally preferable that a community commercial site be developed as one unit with coordinated access, circulation, building design, signage, and landscaping. Parcels within a community commercial site, however, may be developed independently although the City may require that developmental aspects of individual parcels be coordinated through the development review process.
 - (c) Convenient pedestrian and bicyclist access to a development site from adjoining residential areas shall be provided where practical. Local street connections between community commercial sites and adjoining neighborhoods shall be considered on a case-by-case basis.

The site configuration and characteristics and relationship to the street system shall be such that privacy of adjacent non-commercial uses can be maintained.
 - (d) Access needs of individual parcels and uses shall be coordinated within a site so as to limit the number of access driveways to adjacent streets.
 - (e) Unique features of the site should be incorporated into the site development plan.
 - (f) Exterior lighting, noise, and activities associated with the Community Commercial district shall be controlled or mitigated so that they do not adversely affect adjacent residential uses and comply with any applicable provisions of the Tigard Municipal Code regulating noise, light, and nuisances. Operating hour restrictions may be placed on uses within the district, either through restrictions within the zoning district regulations or through conditions of approval of a Plan map amendment for a particular site.

IMPLEMENTATION STRATEGIES

- 1. The Community Development Ordinance shall:
 - a. Include a neighborhood commercial district, a general commercial district, a highway commercial district and a commercial professional district area.

- b. Require that:
 - (1) The areas be subject to site design review;
 - (2) A minimum of 15% landscaping be provided; and
 - (3) Necessary street improvements be made prior to development.
 - c. Prohibit single family residential uses in the neighborhood commercial and general commercial centers.
 - d. Allow for residential uses above the first story of commercial uses only in the central businesses and commercial professional districts.
2. As a part of the corridor study proposed for Pacific Highway (99W) by the Oregon Department of Transportation and the Metropolitan Service District, the City shall:
- a. Review the commercial development patterns that have occurred along Pacific Highway and look at ways to reduce access points along Pacific Highway; and
 - b. Develop ways to consolidate new commercial development into commercial centers rather than strip commercial areas.

12.3 INDUSTRIAL

The intent of the Industrial land use designation is to:

- 1. Provide for the designation of suitable lands for industrial use;
- 2. Provide for economic growth and development;
- 3. Protect existing and potential lands suitable for industrial development from encroachment by non-industrial or incompatible uses;
- 4. Provide land for industrial use by type to minimize the impact on surrounding development; and
- 5. Take advantage of existing transportation facilities.

Industrial lands are classified as:

- 1. Heavy Industrial Lands are areas intended to provide for manufacturing, processing and assembling activities. Uses within this classification are characterized by large buildings and large storage areas and as having associated external effects such as smoke, noise, odor or visual pollution.
- 2. Light Industrial Lands are areas intended to provide for manufacturing, processing, assembling and related office activities. Uses within this classification are of a size and scale which makes them generally compatible with other non-industrial uses and which have no off-site effects.

The land use map designates specific areas of the city for industrial development. Over time, however, there may be a demand for new sites. Therefore, the following policy will apply in making such decisions.

POLICY

12.3.1 THE CITY SHALL REQUIRE THAT:

- a. SITES FOR HEAVY INDUSTRIAL DEVELOPMENT SHALL BE:
 - (1) SEPARATED BY TOPOGRAPHY ESTABLISHED BUFFERS, TRANSPORTATION OR OTHER NON-RESIDENTIAL LAND USES FROM RESIDENTIALLY DEVELOPED AREAS.
 - (2) LOCATED IN AREAS HAVING RAIL SERVICE, ARTERIAL OR MAJOR COLLECTOR ACCESS.

- b. SITES FOR LIGHT INDUSTRIAL DEVELOPMENT SHALL BE:
 - (1) BUFFERED FROM RESIDENTIAL AREAS TO ENSURE THAT PRIVACY AND THE RESIDENTIAL CHARACTER OF THE AREA ARE PRESERVED.
 - (2) LOCATED ON AN ARTERIAL OR COLLECTOR STREET AND THAT INDUSTRIAL TRAFFIC SHALL NOT BE CHanneled THROUGH RESIDENTIAL AREAS.
- c. THE SITE SHALL BE OF A SIZE AND SHAPE WHICH WILL PROVIDE FOR THE SHORT AND LONG RANGE NEEDS OF THE USE.
- d. THE LAND INTENDED FOR DEVELOPMENT SHALL HAVE AN AVERAGE SITE TOPOGRAPHY OF LESS THAN 6% GRADE, OR THAT IT CAN BE DEMONSTRATED THAT THROUGH ENGINEERING TECHNIQUES ALL LIMITATIONS TO DEVELOPMENT AND THE PROVISION OF SERVICES CAN BE MITIGATED.
- e. IT CAN BE DEMONSTRATED THAT ASSOCIATED LIGHTS, NOISE AND OTHER EXTERNAL EFFECTS WILL NOT INTERFERE WITH THE ACTIVITIES AND USES ON SURROUNDING PROPERTIES.
- f. ALL OTHER APPLICABLE PLAN POLICIES CAN BE MET.

IMPLEMENTATION STRATEGIES

- 1. Industrial development adjacent to existing or planned residential areas shall be conditioned to ensure that:
 - a. The specific proposed use will be compatible with adjacent uses;
 - b. The design of the facility and its site will not place visual or physical burdens on the surrounding areas;
 - c. The operational characteristics of the facility will be compatible with surrounding uses and include[s] consideration of;
 - (1) Hours of operation;
 - (2) Delivery and shipping characteristics;
 - (3) Noise;
 - (4) Lighting; and
 - (5) Other use characteristics.
- 2. The Community Development Code shall include the following provisions:
 - a. A planned industrial park zoning district which will include development provisions which provide for:
 - (1) A basic street and utility pattern which will permit flexibility in the size of industrial sites;
 - (2) A circulation system that provides direct access to arterials or collectors that will not channel traffic through residential areas;
 - (3) An internal circulation system which connects to adjoining sites;
 - (4) A complete set of pre-imposed restrictions (e.g. deed restrictions, restriction covenants, etc.) that are enforceable upon all occupants of the industrial park including provisions for site improvement, building design, landscaping, sign control, off-street parking and site maintenance;
 - (5) Evidence of continuing management responsibility to enforce restrictions established under the original development plan;

- (6) Recognition of the differing transportation requirements of employees and service vehicles with adequate provision for public transit access; and
- (7) A minimum of 25% of landscaping;
- b. Design review provisions which apply to industrial development; and
- c. Use classifications which exclude residential uses from industrial areas as primary uses.

12.4 COMMUNITY UTILITIES AND FACILITIES

Public utilities and facilities include public and private activities which are owned and operated for the benefit of the public. These include, for example, schools, libraries, hospitals, parks, golf courses, police and fire stations, water service, sewerage facilities and other operations performed as a public service. These facilities and uses have a direct effect on the public health, safety and welfare. They must be located in a manner which maximizes the net gains to the public and relates to the service area.

The purposes of this plan section are to:

1. Provide services where and when appropriate;
2. Locate community utilities and facilities where appropriate access and required services can be achieved;
3. Support community identity and development of community centers;
4. Reduce auto trips by clustering public services with other related commercial, office and industrial uses;
5. Minimize adverse impacts on adjacent development through site location and design guidelines; and
6. Promote reduced crime potential through design and location based on the principles of defensible space.

POLICY

- 12.4.1 THE CITY SHALL PROVIDE FOR THE LOCATION OF COMMUNITY FACILITIES IN A MANNER WHICH ACCORDS WITH:
- a. THE APPLICABLE POLICIES IN THIS PLAN;
 - b. THE LOCATIONAL CRITERIA APPLICABLE TO THE SCALE AND STANDARDS OF THE USE.

The following list of uses are examples for each category defined under this section:

Minor Impact Utilities & Facilities

- Minor Impact Utilities
- Tax Lots & Neighborhood Parks
- Utility Poles & Lines, Fire Hydrants, Bus Shelters
- Grade Schools
- Water Storage
- Telephone Co. Switching Station
- Power Substation

High Impact Utilities & Facilities

- Postal Services
- Fire Station

Medium Impact Utilities & Facilities

- Admin. Service Use (Gov't Services)
- Community Parks
- Golf Courses
- Cultural Exhibits
- Library Services
- Lodges, Fraternal & Civic Assembly
- Middle Schools
- High Schools
- Trade Schools
- Religious Assembly
- Transit Station (within CBD)
- Community Clinic Facilities
- Cemetery Recycling Center

Major Impact Utilities & Facilities

- Community Recreation
- Hospitals

- Ambulance Service
- Transit Station (outside CBD)
- Major Impact Services & Utilities
- Land Fill

1. Minor Impact Utilities and Facilities

A. Locational Criteria

(1) Access

(a) Access to a minor impact, utility or facility may be from a local street provided:

- (i) Site access will not cause dangerous intersections or traffic congestion considering the roadway capacity, existing and projected traffic counts, speed limits and number of turning movements.

(2) Impact of the Proposed Change on Adjacent Lands

(a) The use shall be allowed provided:

- (i) Associated lights and noise will not interfere with the activities and uses on surrounding properties;
- (ii) Large scale construction and parking lots can be buffered from the adjacent uses;
- (iii) Privacy of adjacent residential developments can be maintained;
- (iv) Community identity can be maintained through design and site layout which blends the structure into the residential character of the area; and
- (v) Buffering can be used to screen the project from adjacent uses.

(3) Site Characteristics

(a) The use shall be allowed provided:

- (i) The unique natural features, if any, can be incorporated into the design of the facilities or arrangement of land uses;
- (ii) The land intended for development has an average site topography of less than 25% grade, or it can be demonstrated that through engineering techniques, all limitations to development and the provision of services can be mitigated; (NOTE: This does not apply to parks.)
- (iii) The site is of a size which can accommodate [the] present and future uses and is of a shape which allows for a site layout in a manner which maximizes user convenience and energy conservation.

2. Medium Impact Utilities and Facilities

A. Locational Criteria

(1) Access

- (a) There is direct access from the site to a collector street and traffic will not be routed through local neighborhood streets.
- (b) Site access will not cause dangerous intersections or traffic congestion considering the roadway capacity, existing and projected traffic counts, speed limits and number of turning movements.
- (c) There is public transit within one-quarter mile of the site.

(2) Impact of the Proposed Change on Adjacent Lands

- (a) It is compatible with surrounding uses, considering scale, character and use.
 - (b) It will reinforce orderly and timely development.
 - (c) Associated lights and noise will not interfere with the activities and uses on surrounding properties.
 - (d) Large scale construction and parking lots can be buffered from the adjacent uses.
 - (e) Privacy of adjacent residential developments can be maintained.
 - (f) The site layout can respond to existing community identity and street patterns.
 - (g) Buffering can screen the project from adjacent uses.
 - (h) There is adequate area landscaping to filter the dust from the site area.
- (3) Site Characteristics
- (a) The land intended for development has an average site topography of less than a 10% grade, or it can be demonstrated that through engineering techniques, all limitations to development and the provision of services can be mitigated. (Note: This does not apply to parks.)
 - (b) The site is of a size which can accommodate the present and future uses and is of a shape which allows for a site layout in a manner which maximizes user convenience and energy conservation.
 - (c) The unique natural features, if any, can be incorporated into the design of the facilities or arrangement of land uses.

3. High Impact Utilities and Facilities

A. Scale

(1) Access

- (a) There is direct access from the site to a major collector street and traffic will not be routed through local neighborhood streets.
- (b) Site access will not cause dangerous intersections or traffic congestion, considering the roadway capacity, existing and projected traffic counts, speed limits and number of turning movements.
- (c) There is public transit to the site.

(2) Impact of the Proposed Change on Adjacent Lands

- (a) It is compatible with surrounding uses, considering scale, character and use.
- (b) It will reinforce orderly and timely development.
- (c) Associated lights and noise will not interfere with the activities and uses on surrounding properties.
- (d) Large scale construction and parking lots can be buffered from the adjacent uses.
- (e) Privacy of adjacent residential developments can be maintained.
- (f) Community identity can be maintained through design and site layout which blends the structure into the residential character of the area.
- (g) Buffering can screen the project from adjacent uses.
- (h) There is adequate landscaping to filter the dust from the site area.

(3) Site Characteristics

- (a) The land intended for development has an average site topography of less than a 10% grade, or it can be demonstrated that through engineering techniques, all limitations to development and the provision of services can be mitigated.
- (b) The unique natural features, if any, can be incorporated into the design of the facilities or arrangement of land uses.
- (c) The site is of a size which can accommodate the present and future uses and is of a shape which allows for a site layout in a manner which maximizes user convenience and energy conservation.

4. Major Impact Utilities and Facilities

A. Locational Criteria

(1) Access

- (a) There is direct access from the site to an arterial or freeway. Traffic will not be routed through local neighborhood streets.
- (b) Site access will not cause dangerous intersections or traffic congestion, considering the roadway capacity, existing and projected traffic counts, speed limits and number of turning movements.
- (c) There is public transit to the site.

(2) Impact of the Proposed Change on Adjacent Lands

- (a) It is compatible with surrounding uses, considering scale, character and use.
- (b) It will reinforce orderly and timely development.
- (c) Associated lights and noise will not interfere with the activities and uses on surrounding properties.
- (d) Large scale construction and parking lots can be buffered from the adjacent uses.
- (e) Privacy of adjacent residential developments can be maintained.
- (f) Community identity can be maintained through design and site layout which blends the structure into the residential character of the area.
- (g) Buffering can screen the project from adjacent uses.
- (h) There is adequate landscaping to filter the dust from the site area.
- (i) Development can support and/or be compatible with the surrounding developments.

(3) Site Characteristics

- (a) The land intended for development has an average site topography of less than a 10% grade, or it can be demonstrated that through engineering techniques, all limitations to development and the provision of services can be mitigated.
- (b) The unique natural features, if any, can be incorporated into the design of the facilities or arrangement of land uses.

- (c) The site is of a size which can accommodate the present and future uses and is of a shape which allows for a site layout in a manner which maximizes user convenience and energy conservation.

IMPLEMENTATION STRATEGIES

1. As a part of the ongoing planning program, the City shall:
 - a. Prepare and maintain a data base inventory of existing public utilities and facilities; and
 - b. Maintain community planning programs to determine community facility needs.
2. The following strategies should be addressed as a part of the Community Development Code:
 - a. Provide for public utilities and facilities as conditional developments;
 - b. Require design review approval for all facilities and uses; and
 - c. Include standards related to access, circulation, parking, loading, storage, landscaping, and signs.
3. The City shall develop a capital improvements program which outlines public utility and facility needs provided by the County.

12.5 MIXED USE DISTRICTS

POLICY

12.5.1 THE CITY SHALL PROVIDE FOR MIXED USE DEVELOPMENTS IN ACCORDANCE WITH:

- a. APPLICABLE PLAN POLICIES;
- b. APPLICABLE PURPOSE STATEMENTS; AND
- c. APPLICABLE COMMUNITY DEVELOPMENT CODE PROVISIONS.

1. Mixed Use Commercial

A. The purpose of the Mixed Use Commercial (MUC) land use designation is:

1. To create a dense mixed-use commercial district that forms the commercial core of the Washington Square Regional Center;
2. To create a high quality, mixed use commercial district, in conjunctions with the City of Tualatin, on the site of the former Durham Quarry. (Rev. Ord. 01-07)
3. To provide opportunities for major retail goods and services, office employment, and housing in close proximity, and with good access to transportation services;
4. To implement the Metro 2040 Growth Concept and Urban Growth Management Functional Plan for areas designated Regional Center within the City of Tigard.

2. Mixed Use Employment

A. The purpose of the Mixed Use Employment (MUE) land use designation is:

1. To create a mixed-use employment district that is complementary to the rest of the community and the region;
2. To provide opportunities for employment and for new business and professional services in close proximity to retail centers and major transportation facilities;

3. To provide for major retail goods and services accessible to the general public, and minor retail goods and services accessible to the public which works and lives within the MUE district;
4. To provide for groups and businesses in centers;
5. To provide for residential uses which are compatible with and supportive of retail and employment uses;
6. To implement the Metro 2040 Growth Concept and Urban Growth Management Functional Plan for areas designated Regional Center and Employment within the City of Tigard.

3. Mixed Use Residential

A. The purpose of the Mixed Use Residential (MUR) land use designation is:

1. To create moderate and high density mixed use residential districts in close proximity to other mixed-use districts;
2. To provide opportunities for a variety of housing types and densities, and to produce that housing in ways that residents have a high degree of pedestrian amenities, recreation opportunities and access to transit;
3. To incorporate limited commercial and service uses within mixed-use projects that provide benefits and amenities to residents, but are compatible with residential uses.
4. To implement the Metro 2040 Growth Concept and Urban Growth Management Functional Plan for areas designated Regional Center within the City of Tigard.

POLICIES

- 12.5.2 THE CITY SHALL APPLY A MIXED USE COMMERCIAL LAND USE DESIGNATION FOR AREAS SHOWN AS REGIONAL CENTER IN THE METRO 2040 GROWTH CONCEPT OR TO OTHER AREAS IDENTIFIED BY THE CITY AS APPROPRIATE FOR MIXED USE COMMERCIAL DEVELOPMENT.
- (Rev. Ord. 01-07)
- 12.5.3 THE CITY SHALL APPLY A MIXED USE EMPLOYMENT LAND USE DESIGNATION FOR AREAS SHOWN AS REGIONAL CENTER AND EMPLOYMENT IN THE METRO 2040 GROWTH CONCEPT.
- 12.5.4 THE CITY SHALL APPLY A MIXED USE RESIDENTIAL LAND USE DESIGNATION FOR AREAS SHOWN AS REGIONAL CENTER IN THE METRO 2040 GROWTH CONCEPT.

IMPLEMENTATION STRATEGIES

1. The Community Development Code shall:
 - a. Include two Mixed Use Commercial Districts; MUC and MUC-1
(Rev. Ord 01-07)
 - b. Include high density and moderate density Mixed Use Employment Districts;
 - c. Include high density and moderate density Mixed Use Residential Districts.
 - d. Require that:
 1. Minimum residential densities and floor area ratios (FAR) be achieved;

2. Certain commercial uses be limited so that a pedestrian-oriented development pattern is achieved;
 3. Design standards for public improvements, site design, building design, signs and landscaping are achieved in order to create high quality, pedestrian-oriented developments;
 4. All areas be subject to Site Development Review.
- e. Provide for:
1. Limited adjustments, and phasing so that development standards can be achieved over time;
 2. Limited adjustments in development standards, including minimum density and FAR requirements, in cases where adjustments are necessary to avoid environmental impacts;
 3. Improvements to pre-existing uses and developments so that existing residents and businesses may continue to thrive;
 4. Incentives to preserve and enhance significant wetlands, streams and floodplains.